

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<p>Pyroforic liquids, N.O.S.  <i>Alkyl aluminum halides.</i>  <i>Aluminum alkyls.</i>  <i>Aluminum tributyl.</i>  <i>Aluminum triethyl.</i>  <i>Aluminum trimethyl.</i>  <i>Diethyl aluminum chloride.</i>  <i>Diethyl magnesium.</i>  <i>Dimethyl magnesium.</i>  <i>Dimethyl zinc.</i>  <i>Ethyl aluminum dichloride.</i>  <i>Ethyl aluminum sesquichloride.</i>  <i>Methyl aluminum sesquibromide.</i>  <i>Methyl aluminum sesquichloride.</i>  <i>Pyroforic fuel.</i>  <i>Pyroforic solutions.</i>  <i>Triisobutyl aluminum.</i>  <i>Zinc ethyl.</i></p>	<p><i>Ignites spontaneously when exposed to air.</i>  <i>May react violently on contact with water.</i>  Cylinders must have a minimum design pressure of 175 p.s.i.  Unless packed in strong wooden boxes and secured therein to protect valves, cylinders must be stowed with all valves and safety relief devices in the vapor space.</p>	Red.....	<p>Stowage:  "On deck protected."  Outside containers:  Steel barrels or drums:  (ICC-17C) STC, WIMC not over 1 gal. cap. each, not over 35 gal. net contents.  (ICC-37A) STC, WIMC not over 1 gal. cap. each, not over 5 gal. total cap.  Wooden boxes (ICC-15A, 15B, 15C), WIMC ICC-2A WIC glass or metal not over 1 qt. cap. each, not over 1 gal. net contents.  Fiberboard boxes (ICC-12A), WIMC ICC-2A WIC glass or metal not over 1 gal. net contents.  Cylinders as prescribed for any compressed gas except acetylene.  Authorized for stowage "On deck in open" only:  Portable tanks (ICC-51) not over 20,000 lb. gr. wt.  Authorized for stowage "On deck" and "First deck below":  Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only).  Tank cars complying with ICC regulations (trainships only).</p> <p>Stowage:  "On deck under cover."  "Tween decks readily accessible."  "Under deck away from heat."  Outside containers:  Wooden boxes or crates.  (See Note in columns 5, 6, and 7.)</p>
Refrigerating machines (assembled for shipment and containing not over 15 pounds of an inflammable liquid for their operation).	Outside containers shall be marked with proper shipping name.	No label required.	

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.....	Not permitted.....	Not permitted.
<p>Stowage:  "On deck under cover."  "Tween decks readily accessible."  "Under deck away from heat."  Outside containers:  Wooden boxes or crates.</p> <p>Note: It is not required that the above containers be ICC specification containers, although ICC specification containers are acceptable, but the officer in charge of loading the vessel shall satisfy himself they are sufficient in all respects for the purpose intended.</p>	<p>Ferry stowage (AA).....  Outside containers:  Wooden boxes or crates.</p>	<p>Ferry stowage (BB).  Outside containers:  Wooden boxes</p>

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Resin solution ( <i>Resin compound liquids</i> ) (when possessing a flashpoint at or below 50° F.).	<i>Resin dissolved in a volatile solvent.</i> <i>Flashpoint variable, depending upon the solvent used.</i>	Red	<p>Stowage:</p> <p>"On deck protected."</p> <p>"On deck under cover."</p> <p>"Tweens decks readily accessible."</p> <p>"Under deck away from heat."</p> <p>Outside containers:</p> <p>Steel barrels or drums:</p> <p>(ICC-5, 5A, 5B, 5C, 5G, 6B, 6C) not over 110 gal. cap.</p> <p>(ICC-5M, 6A) not over 55 gal. cap.</p> <p>(ICC-17C, 17E, 17H) STC, not over 55 gal. cap.</p> <p>(ICC-37A, 37B) STC, not over 5 gal. cap.</p> <p>(ICC-17H, 37A) WIC of glass, not over 9 pts. cap. each.</p> <p>(ICC-37P) NRC, not over 5 gal. cap.</p> <p>Cylindrical steel overpacks:</p> <p>(ICC-6D) WIC ICC-2S, not over 55 gal. cap.</p> <p>(ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap.</p> <p>Aluminum barrels or drums:</p> <p>(ICC-42B, 42C) not over 110 gal. cap.</p> <p>(ICC-42F) not over 50 gal. cap.</p> <p>(ICC-42H) not over 55 gal. cap.</p> <p>Wooden barrels or kegs:</p> <p>(ICC-11A, 11B) WIC, not over 16 gal. cap.</p> <p>Wooden boxes:</p> <p>(ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap.</p> <p>Fiberboard boxes:</p> <p>(ICC-12A, 12B) WIC, not over 65 lb. gr. wt.</p> <p>Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap.</p> <p>Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap.</p> <p>Authorized for stowage "On deck in open" only:</p> <p>Portable tanks (ICC-51) not over 20,000 lb. gr. wt.</p> <p>Authorized for stowage "On deck" and "First deck below":</p> <p>Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only).</p> <p>Tank cars complying with ICC regulations (trainships only).</p> <p>Authorized only for export shipments:</p> <p>Steel barrels or drums:</p> <p>(ICC-17X) STC, not over 55 gal. cap.</p> <p>Wooden boxes:</p> <p>(ICC-15X) WIMC, not over 10 gal. cap.</p>

## Inflammable Liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
<p>Stowage:</p> <p>"On deck protected."</p> <p>"On deck under cover."</p> <p>"Tweens decks readily accessible."</p> <p>Outside containers:</p> <p>Steel barrels or drums:</p> <p>(ICC-5, 5A, 5B, 5C, 5G, 5M, 6A, 6B, 6C) not over 55 gal. cap.</p> <p>(ICC-17C, 17E, 17H) STC not over 30 gal. cap.</p> <p>(ICC-37A, 37B) STC not over 5 gal. cap.</p> <p>(ICC-17H, 37A) WIC of glass, not over 9 pints capacity each.</p> <p>(ICC-37P) NRC, not over 5 gal. cap.</p> <p>Cylindrical steel overpacks:</p> <p>(ICC-6D) WIC ICC-2S, not over 55 gal. cap.</p> <p>(ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap.</p> <p>Aluminum barrels or drums:</p> <p>(ICC-42B, 42C) not over 30 gal. cap.</p> <p>(ICC-42F) not over 50 gal. cap.</p> <p>(ICC-42H) not over 55 gal. cap.</p> <p>Wooden barrels or kegs:</p> <p>(ICC-11A, 11B) WIC not over 16 gal. cap.</p> <p>Wooden boxes:</p> <p>(ICC-15A, 15B, 16A, 19A, 19B) WIC not over 10 gal. total cap.</p> <p>Fiberboard boxes:</p> <p>(ICC-12A, 12B) WIC not over 65 lb. gr. wt.</p> <p>Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap.</p> <p>Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap.</p>	<p>Ferry stowage (AA)-----</p> <p>Outside containers:</p> <p>Steel barrels or drums:</p> <p>(ICC-5, 5A, 5B, 5C, 5G, 6B, 6C) not over 110 gal. cap.</p> <p>(ICC-5M, 6A) not over 55 gal. cap.</p> <p>(ICC-17C, 17E, 17H) STC not over 55 gal. cap.</p> <p>(ICC-37A, 37B) STC not over 5 gal. cap.</p> <p>(ICC-17H, 37A) WIC of glass, not over 9 pints capacity each.</p> <p>(ICC-37P) NRC, not over 5 gal. cap.</p> <p>Cylindrical steel overpacks:</p> <p>(ICC-6D) WIC ICC-2S, not over 55 gal. cap.</p> <p>(ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap.</p> <p>Aluminum barrels or drums:</p> <p>(ICC-42B, 42C) not over 110 gal. cap.</p> <p>(ICC-42F) not over 50 gal. cap.</p> <p>(ICC-42H) not over 55 gal. cap.</p> <p>Wooden barrels or kegs:</p> <p>(ICC-11A, 11B) WIC not over 16 gal. cap.</p> <p>Wooden boxes:</p> <p>(ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC not over 10 gal. total cap.</p> <p>Fiberboard boxes:</p> <p>(ICC-12A, 12B) WIC not over 65 lb. gr. wt.</p> <p>Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap.</p> <p>Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap.</p>	<p>Ferry stowage (BB)-----</p> <p>Outside containers:</p> <p>Steel barrels or drums:</p> <p>(ICC-5, 5A, 5B, 5C, 5G, 6B, 6C) not over 110 gal. cap.</p> <p>(ICC-5M, 6A) not over 5 gal. cap.</p> <p>(ICC-17C, 17E, 17H) STC, not over 55 gal. cap.</p> <p>(ICC-37A, 37B) STC, not over 5 gal. cap.</p> <p>(ICC-17H, 37A) WIC of glass, not over 9 pints capacity each.</p> <p>(ICC-37P) NRC, not over 5 gal. cap.</p> <p>Cylindrical steel overpacks:</p> <p>(ICC-6D) WIC ICC-2S, not over 55 gal. cap.</p> <p>(ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap.</p> <p>Aluminum barrels or drums:</p> <p>(ICC-42B, 42C) not over 110 gal. cap.</p> <p>(ICC-42F) not over 50 gal. cap.</p> <p>(ICC-42H) not over 55 gal. cap.</p> <p>Wooden barrels or kegs:</p> <p>(ICC-11A, 11B) WIC not over 16 gal. cap.</p> <p>Wooden boxes:</p> <p>(ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC not over 10 gal. total cap.</p> <p>Fiberboard boxes:</p> <p>(ICC-12A, 12B) WIC not over 65 lb. gr. wt.</p> <p>Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap.</p> <p>Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap.</p> <p>Authorized only for export shipments:</p> <p>Steel barrels or drums:</p> <p>(ICC-17X) STC, not over 55 gal. cap.</p> <p>Wooden boxes:</p> <p>(ICC-15X) WIMC, not over 10 gal. cap.</p>

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Road asphalt or tar, liquid. <i>Asphalt cut-back.</i> Tar, liquid. (When possessing a flashpoint at or below 80° F.) (See § 146.27-100 for transportation of asphalt or road tar in highway tank vehicles.)	<i>Substance prepared by the fluxing of asphalt with petroleum distillate.</i> <i>Pungent, penetrating odor.</i> <i>Immiscible with water.</i>	Red	<p>Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat."</p> <p>Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G, 6B, 6C) not over 110 gal. cap. (ICC-5M, 6A) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42F) not over 50 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs, WIO (ICC-11A, 11B) not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes, WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized for stowage "On deck in open" only: Portable tanks (ICC-51) not over 20,000 lb. gr. wt. Authorized for stowage "On deck" and "First deck below": Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only). Tank cars complying with ICC regulations (trainships only). Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes, WIMC (ICC-15X) not over 10 gal. cap. Authorized only for liquids having a flashpoint above 20° F.: Steel barrels or drums (ICC-17E, 17H) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-10A, 10B, 10C) not over 50 gal. cap. Fiberboard boxes (ICC-12E) WIMC not over 110 lbs. gr. wt.</p>

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
<p>Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible."</p> <p>Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G, 6B, 6C) not over 110 gal. cap. (ICC-5M, 6A) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42F) not over 50 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs, WIO (ICC-11A, 11B) not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes, WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.</p>	<p>Ferry stowage (AA)----- Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G, 6B, 6C) not over 110 gal. cap. (ICC-5M, 6A) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42F) not over 50 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs, WIO (ICC-11A, 11B) not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes, WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.</p>	<p>Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G, 6B, 6C) not over 110 gal. cap. (ICC-5M, 6A) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42F) not over 50 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs, WIO (ICC-11A, 11B) not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes, WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes, WIMC (ICC-15X) not over 10 gal. cap. Authorized only for liquids having a flashpoint above 20° F.: Steel barrels or drums (ICC-17E, 17H) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-10A, 10B, 10C) not over 50 gal. cap. Fiberboard boxes (ICC-12E) WIMC, not over 110 lbs. gr. wt.</p>

Table D—Classification.

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Sodium methylate, alcohol mixture. (When possessing a flashpoint at or below 80° F.)	<i>Sodium methylate dissolved in alcohol.</i> <i>Flash point variable.</i>	Red	<p>Stowage: "On deck in open." "On deck under cover." "Tween decks readily accessible."</p> <p>Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized for stowage "On deck in open" only: Portable tanks (ICC-51) not over 20,000 lb. gr. wt. Authorized for stowage "On deck" and "First deck below": Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only). Tank cars complying with ICC regulations (trainships only). Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes WIMC (ICC-15X) not over 10 gal. cap. Containers authorized only for liquids having a flashpoint above 20° F. Steel barrels or drums (ICC-17E, 17H) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-10B) not over 50 gal. cap. Fiberboard boxes WIMC, not over 110 lb. gr. wt.</p>

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
<p>Stowage: "On deck in open." "On deck under cover." "Tween decks readily accessible."</p> <p>Outside containers: (Authorized only for liquids having a flashpoint above 20° F.) Steel barrels or drums: (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.</p>	<p>Ferry stowage (AA). Outside containers: (Authorized only for liquids having a flashpoint above 20° F.) Steel barrels or drums: (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.</p>	<p>Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 1 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes, WIMC (ICC-15X) not over 10 gal. cap. Containers authorized only for liquids having a flashpoint above 20° F. Steel barrels or drums (ICC-17E, 17H) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-10B) not over 50 gal. cap. Fiberboard boxes WIMC, not over 110 lb. gr. wt.</p>

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Solvents, N. O. S. (When possessing a flashpoint at or below 80° F.)	<i>Inflammable, volatile liquids used for solvents, other than those solvents specified by name in these regulations. May be extremely volatile liquids and if so, vapors in air will form explosive mixtures. Vapors may be poisonous and suffocating. Flashpoint variable.</i>	Red	Stowage: "On deck in open." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. for liquids with a flash point exceeding 20° F. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized for stowage "On deck in open" only: Portable tanks (ICC-51) not over 20,000 lb. gr. wt. Authorized for stowage "On deck" and "First deck below": Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only). Tank cars complying with ICC regulations (trainships only). Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes, WIMC (ICC-15X) not over 10 gal. cap. Containers authorized only for liquids having a flashpoint above 20° F. Steel barrels or drums (ICC-17E, 17H) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-10B) not over 50 gal. cap. Fiberboard boxes WIMC, not over 110 lb. gr. wt.
Plastic solvent, N. O. S.		Red.	
Pyroxylin solution.		Red.	
Pyroxylin solvent, N. O. S. (When possessing a flashpoint at or below 80° F.)		Red.	

Inflammable Liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck in open." "On deck under cover." "Tween decks readily accessible." Outside containers: (Authorized only for liquids having a flashpoint above 20° F.) Steel barrels or drums: (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. for liquids with a flash point exceeding 20° F. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (AA). Outside containers: (Authorized only for liquids having a flashpoint above 20° F.) Steel barrels or drums: (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. for liquids with a flash point exceeding 20° F. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C) STC, not over 55 gal. cap. (ICC-17E) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. for liquids with a flash point exceeding 20° F. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap. Fiberboard boxes WIC (ICC-12A, 12B) not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes, WIMC (ICC-15X) not over 10 gal. cap. Containers authorized only for liquids having a flashpoint above 20° F. Steel barrels or drums (ICC-17E, 17H) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-10B) not over 50 gal. cap. Fiberboard boxes WIMC, not over 110 lb. gr. wt.

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Spirits of nitroglycerin... (When consisting of not more than 10% by weight of nitroglycerin in ethyl alcohol or acetone.)	Solutions of nitroglycerin of not more than 10% strength in grain alcohol or acetone. It is not explosive but rupture of a package may allow solvent to evaporate and thus leave the nitroglycerin, which is explosive.	Red.....	Stowage: "On deck protected." "On deck under cover." Outside containers: Wooden boxes lined with ICC-2L, (ICC-15A, 15B, 15C, 16A, 19A) WIMC not over 6 quarts cap. in one outside container. Inside containers must be entirely surrounded by at least 2 inches of fine, dry sawdust or kieselguhr.
Spirits of nitroglycerin... (When consisting of not more than 1% by weight of nitroglycerin in ethyl alcohol.)	Solution of nitroglycerin of not more than 1% strength in grain alcohol.	Red.....	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 65 lb. gr. wt. Inside containers must be entirely surrounded by at least two inches of fine, dry sawdust or kieselguhr.

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.....	Not permitted.....	Not permitted.
Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 65 lb. gr. wt. Inside containers must be entirely surrounded by at least two inches of fine, dry sawdust or kieselguhr.	Ferry stowage (AA)..... Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 65 lb. gr. wt. Inside containers must be entirely surrounded by at least two inches of fine, dry sawdust or kieselguhr.	Ferry stowage (BB). Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 65 lb. gr. wt. Inside containers must be entirely surrounded by at least two inches of fine, dry sawdust or kieselguhr.

Table D—Classification.

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Toluol. (Toluene.)	Colorless volatile liquid. Benzene-like odor, distillate from coal tar. Vapors are 3 times heavier than air and form an explosive mixture within a range of 1¼% to 7% in air. Vapors are poisonous and suffocating. Flashpoint 46° F. Immiscible with water.	Red.	Stowage: "On deck in open." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pts. cap. each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized for stowage "On deck in open" only: Portable tanks (ICC-51) not over 20,000 lb. gr. wt. Authorized for stowage "On deck" and "First deck below": Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only). Tank cars complying with ICC regulations (trainships only). Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes WIMC (ICC-15X) not over 10 gal. cap.

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. B. car ferry, passenger or vehicle
Stowage: "On deck protected." "On deck under cover." Outside containers: Steel barrels or drums: (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes: (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes: (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes (ICC-15X) WIMC not over 10 gal. cap.

Table D—Classification

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Trichlorosilane .....	<i>Clear, transparent, volatile, liquid. Fumes strongly in moist air. Fumes are extremely irritating and corrosive. Decomposes with some violence on contact with water to liberate corrosive gas. Flashpoint below 20° F. Keep cool.</i>	Red .....	<p>Stowage: "On deck protected." "On deck under cover." Outside containers: Steel barrels or drums: (ICC-5A, 5B, 5C,) not over 55 gal. cap. (ICC-5F) not over 11 gal. cap. (ICC-17H, 37A) STC, with inside glass containers not over 1 qt. cap. each, not over 55 gal. total cap. Wooden boxes (ICC-15A, 16B) WIC not over 65 lb. gr. wt. Cylinders as prescribed for any compressed gas except acetylene. Authorized for stowage "On deck in open" only: Portable tanks (ICC-51) not over 20,000 lb. gr. wt. Authorized for stowage "On deck" and "First deck below": Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only). Tank cars complying with ICC regulations (trainships only).</p>

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted .....	Not permitted .....	Not permitted.



Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Turpentine substitutes— (When possessing a flashpoint at or below 80° F.)	Special fractions of petroleum oils (usually with a boiling point of 800° to 820° F.) used in the place of turpentine as a paint thinner, etc. Flashpoint variable. Miscible with water. Clear, colorless liquid having a pungent odor.	Red	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat."
Vinyl acetate	Clear, colorless liquid having a pungent odor. Soluble in most organic solvents. Flashpoint about 80° F. Miscible with water.	Red	Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pts. cap. each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized for stowage "On deck in open" only: Portable tanks (ICC-51) not over 20,000 lb. gr. wt. Authorized for stowage "On deck" and "First deck below": Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only). Tank cars complying with ICC regulations (trainships only). Authorized only for export shipments of turpentine substitutes: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes (ICC-15X) WIMC, not over 10 gal. cap.

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized only for export shipments of turpentine substitutes: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes (ICC-15X) WIMC, not over 10 gal. cap.

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Vinylidene chloride, inhibited.	Clear, colorless to straw-colored, rather volatile liquid having a penetrating odor. Flashpoint below 20° F. Immiscible with water.	Red.....	<p>Stowage:</p> <p>"On deck in open."</p> <p>"On deck under cover."</p> <p>"Tween decks readily accessible."</p> <p>Outside containers:</p> <p>Steel barrels or drums:</p> <p>(ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap.</p> <p>(ICC-5M) not over 55 gal. cap.</p> <p>28L, not over 55 gal. cap.</p> <p>(ICC-17C) STC, not over 55 gal. cap.</p> <p>(ICC-17H, 37A) WIC of glass, not over 9 pts. cap. each.</p> <p>Cylindrical steel overpack:</p> <p>ICC-6D) WIC ICC-2S, not over 55 gal. cap.</p> <p>Aluminum barrels or drums:</p> <p>(ICC-42B, 42C) not over 110 gal. cap.</p> <p>(ICC-42H) not over 55 gal. cap.</p> <p>Wooden barrels or kegs, WIC (ICC-11A, 11B) not over 16 gal. cap.</p> <p>Wooden boxes, WIC (ICC-15A, 15B, 15C, 16A, 19A, 19B) not over 10 gal. total cap.</p> <p>Fiberboard boxes, WIC (ICC-12A, 12B) not over 65 lb. gr. wt.</p> <p>Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap.</p> <p>Cylinders as prescribed for any compressed gas except acetylene.</p> <p>Authorized for stowage "On deck in open" only:</p> <p>Portable tanks (ICC-51) not over 20,000 lb. gr. wt.</p> <p>Authorized for stowage "On deck" and "First deck below":</p> <p>Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only).</p> <p>Tank cars complying with ICC regulations (trainships only).</p>

Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.....	Not permitted.....	Not permitted.

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Wet nitrocellulose colloid, granular or flake (must contain at least 20% by weight of alcohol or a solvent with flashpoint not lower than 30° F.)	Formed by the nitration of cotton by treatment with a mixture of nitric and sulfuric acids. Involved in a fire will give off nitrous fumes, deep orange in color, and extremely irritating and poisonous. Flashpoint variable, not less than 30° F. Keep cool. Check gross weight of containers to be certain no leakage has occurred. Refuse leaking containers or ones showing signs of having leaked. Characteristics and hazards similar to those above.	Red.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5M) not over 490 lb. gr. wt. (ICC-6A, 6B, 6C, 6J, 6K) not over 490 lb. gr. wt. (ICC-17C, 17E, 17H) STC not over 490 lb. gr. wt. (ICC-37A, 37B) STC not over 480 lb. gr. wt. for 37A; 490 lb. gr. wt. for 37B. (ICC-37F) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 490 lb. gr. wt. (ICC-42H) not over 490 lb. gr. wt. Wooden barrels or kegs: (ICC-10A, 10B) not over 490 lb. gr. wt. (ICC-11A, 11B) WIC, not over 490 lb. gr. wt. Wooden boxes: (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes: (ICC-12A, 12B, 12E) WIC, not over 65 lb. gr. wt. Fiber or plywood drums: (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized only for nitrocellulose or collodion cotton, fibrous wet, or colloid nitrocellulose, granular or flake wet: Aluminum barrels or drums (ICC-42F) not over 490 lb. gr. wt.
Wet nitrocellulose, colloid, block forms (must contain at least 25% by weight of alcohol).	Characteristics and hazards similar to those above.	Red.	
Wet nitrocellulose flakes—20% alcohol or solvent (must contain at least 20% by weight of alcohol or a solvent with flashpoint not lower than 30° F.).	Characteristics and hazards similar to those above.	Red.	
Wet nitrocellulose, fibrous (must contain at least 25% by weight of alcohol or a solvent with flashpoint not lower than 30° F.).		Red.	
Wet collodion cotton, fibrous (must contain at least 30% by weight of alcohol or a solvent with flashpoint not lower than 30° F.).			
Wet nitrostarch (must contain at least 30% by weight of alcohol or a solvent with flashpoint not lower than 30° F.). Shipping containers on above shall have marked thereon the gross, tare, and net weight of the package.	Formed by the nitration of starch. Characteristics and hazards similar to those of "Nitrocellulose, wet with an inflammable liquid," which see above. Keep cool. Check gross weight of containers to be certain no leakage has occurred. Refuse leaking containers or ones showing signs of having leaked.	Red.	

## Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.	Not permitted.	Not permitted.

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions markings required	Label required	Required conditions for transportation
			Cargo vessel
Xylol. (Xylene.) (When possessing a flashpoint at or below 80° F.)	Coal tar distillate. Colorless liquid having a characteristic odor. Vapors are 4 times heavier than air and will form an explosive mixture in air. Vapors are poisonous and suffocating. Flashpoint 73° F. or above. Immiscible with water.	Red	Stowage: "On deck in open." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pts. cap. each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes: (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized for stowage "On deck in open" only: Portable tanks (ICC-51) not over 20,000 lb. gr. wt. Authorized for stowage "On deck" and "First deck below": Motor vehicle tank trucks complying with ICC regulations (trailerships and trainships only). Tank cars complying with ICC regulations (trainships only). Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes WIMC (ICC-15X) not over 10 gal. cap.

Inflammable Liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck protected." "On deck under cover." Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (AA)----- Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes: (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-5, 5A, 5B, 5C, 5G) not over 110 gal. cap. (ICC-5M) not over 55 gal. cap. (ICC-17C, 17E, 17H) STC, not over 55 gal. cap. (ICC-17H, 37A) WIC of glass, not over 9 pints capacity each. (ICC-37P) NRC, not over 5 gal. cap. Cylindrical steel overpacks: (ICC-6D) WIC ICC-2S, not over 55 gal. cap. (ICC-6D, 37M(NRC)), WIC ICC 2SL, not over 55 gal. cap. Aluminum barrels or drums: (ICC-42B, 42C) not over 110 gal. cap. (ICC-42H) not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 16 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A, 19B) WIC, not over 10 gal. total cap. Fiberboard boxes: (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. (ICC-12E) WIMC, not over 110 lb. gr. wt. Fiber or plywood drums (ICC-21C, 22A, 22B) WIC not over 1 gal. cap. Fiber drum (ICC-21C) WIC ICC-2S, ICC-2SL, not over 55 gal. cap. Cylinders as prescribed for any compressed gas except acetylene. Authorized only for export shipments: Steel barrels or drums (ICC-17X) STC, not over 55 gal. cap. Wooden boxes WIMC (ICC-15X) not over 10 gal. cap.

Table D—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Zirconium, metallic, solutions or mixtures thereof, liquid.	<i>Finely divided zirconium suspended in an inflammable liquid. Zirconium metal highly inflammable in dry state. Flash point variable. Stow away from oxidizing materials.</i>	Red	Stowage: "On deck protected." "On deck under cover." Outside containers: Wooden boxes (ICC-15A, 15B, 15C) WIC, not over 16 gal. cap.

## Inflammable liquids—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted	Not permitted	Not permitted.

[CGFR 54-16, 19 F.R. 4931, Aug. 6, 1954; CGFR 54-52, 19 F.R. 8515, Dec. 14, 1954; CGFR 55-20, 20 F.R. 4059, June 10, 1955; CGFR 56-29, 21 F.R. 7065, Sept. 20, 1956; CGFR 57-33, 22 F.R. 8581, Oct. 29, 1957; CGFR 57-49, 22 F.R. 10061, Dec. 14, 1957; CGFR 58-9, 23 F.R. 4846, June 28, 1958; CGFR 58-48, 23 F.R. 9636, Dec. 12, 1958; CGFR 59-14, 24 F.R. 5271, June 30, 1959; CGFR 59-46, 24 F.R. 9391, Nov. 21, 1959; CGFR 60-33, 25 F.R. 5237, June 11, 1960; CGFR 60-70, 25 F.R. 11211, Nov. 26, 1960; CGFR 61-11, 26 F.R. 3924, May 5, 1961; CGFR 61-44, 26 F.R. 11019, Nov. 23, 1961; CGFR 62-11, 27 F.R. 5281, June 5, 1962; CGFR 62-48, 27 F.R. 12134, Dec. 7, 1962; CGFR 63-19, 28 F.R. 5380, May 30, 1963; CGFR 64-20, 29 F.R. 6791, May 23, 1964; CGFR 64-83, 29 F.R. 18184, Dec. 22, 1964; CGFR 65-17, 30 F.R. 7439, June 5, 1965]

# Subpart 146.22—Detailed Regulations Governing Inflammable Solids and Oxidizing Materials

## § 146.22-1 Definition of inflammable solids and oxidizing materials.

An inflammable solid is defined by the I.C.C. regulations as any solid material, other than one classified as an explosive, which, under conditions incident to transportation, is liable to cause fires through friction, absorption of moisture, spontaneous chemical changes, retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious transportation hazard. Examples: certain metallic hydrides, metallic sodium and potassium, and certain oily fabrics, processed meals, and nitrocellulose products. An oxidizing material is defined by the I.C.C. regulations as a substance such as a chlorate, permanganate, peroxide, nitro carbo nitrate, or a nitrate that yields oxygen readily to stimulate the combustion of organic matter. Such definitions are binding upon all shippers making shipments of inflammable solids and oxidizing materials by common carrier vessels engaged in interstate or foreign commerce by water. These definitions are accepted and adopted and form part of the regulations in this subchapter applying to all shippers making shipment of inflammable solids and oxidizing materials by any vessel, and shall apply to the owners, charterers, agents, master, or other person in charge of a vessel and to other persons, transporting, carrying, conveying, storing, stowing or using inflammable solids or oxidizing materials on board any vessel subject to R.S. 4472, as amended (48 U.S.C. 170), and the regulations in this subchapter.

[CGFR 60-33, 25 F.R. 5237, June 11, 1960]

## § 146.22-5 Stowage on board vessels.

(a) All inflammable solids and oxidizing materials offered for transportation on board vessels shall, when taken on board a vessel, be stowed in accordance with the provisions applying to the particular character of vessel as shown in the tables forming § 146.22-100, and with the detailed regulations of stowage.

(b) When "On deck in open" stowage is permitted for any substance by § 146.22-100 it shall apply only when

such substance is packed in watertight containers.

[CGFR 59-14, 24 F.R. 5272, June 30, 1959]

## § 146.22-7 Use of power-operated industrial trucks in spaces containing flammable solids and oxidizing materials.

(a) In a space in which packaged flammable solids or oxidizing materials are stowed, only approved power-operated industrial trucks with a recognized testing laboratory designation of EX, EE, GS, LPS, and DS (see § 146.09-15) may be used for handling cargo including the handling of such packaged flammable solids or oxidizing materials.

(b) When flammable solids or oxidizing materials are contained in closed cargo vans or closed containers and no other dangerous cargo is stowed in the hold or compartment, any standard commercial type power-operated industrial truck in safe operating condition and having minimum safety features (see § 146.09-15) may be used in the space.

(c) When oxidizing materials in bulk are stowed in a hold or compartment, any approved commercial type power-operated industrial truck may be used in the space.

[CGFR 61-44, 26 F.R. 11020, Nov. 23, 1961]

## § 146.22-10 Stowage of inflammable solids with explosives and other dangerous articles.

The stowage of inflammable solids with explosives and other dangerous articles shall conform to the following conditions:

(a) Inflammable solids shall not be stowed in a hold or compartment containing Class A or Class B explosives, nor in any hold or compartment above, below or adjacent to one containing Class A or Class B explosives. Inflammable solids shall not be stowed on deck over a hatch containing Class A or Class B explosives. Inflammable solids shall not be stowed in the same hold or compartment with Class C explosives.

(b) Inflammable solids shall not be stowed in the same hold or compartment with inflammable liquids.

(c) Inflammable solids shall not be stowed in the same hold or compartment with oxidizing materials.

(d) Inflammable solids shall not be stowed in the same hold or compartment with corrosive liquids.

(e) Inflammable solids shall not be stowed in the same hold or compartment over cylinders of non-inflammable compressed gases.

(f) Inflammable solids shall not be stowed in the same hold or compartment with poisonous articles.

(g) Inflammable solids shall not be stowed in the same hold or compartment with cotton, nor in the hold or compartment above or below one containing cotton.

[CGFR 59-14, 24 F.R. 5272, June 30, 1959, as amended, CGFR 60-33, 25 F.R. 5238, June 11, 1960]

## § 146.22-15 Stowage of oxidizing materials with explosives and other dangerous articles.

The stowage of oxidizing materials with explosives and other dangerous articles shall conform to the following conditions:

(a) Oxidizing materials shall not be stowed in a hold or compartment containing Class A or Class B explosives, nor in any hold or compartment above, below or adjacent to one containing Class A or Class B explosives. Oxidizing materials shall not be stowed on deck over a hatch containing Class A or Class B explosives. Oxidizing materials shall not be stowed in the same hold or compartment with Class C explosives.

(b) Ammonium nitrate or nitro carbo nitrate may be stowed with dynamite, commercial boosters and/or other non-priming non-initiating types of explosives which are compatible with dynamite as follows if the aggregate is considered Class A explosives:

(1) Stowage of ammonium nitrate or nitro carbo nitrate in the same hold or compartment with the explosives mentioned in this paragraph (b) or in holds or compartments adjacent to these explosives is permitted provided the ammonium nitrate or nitro carbo nitrate is packaged in strong metal cans, metal or fiber drums, barrels, kegs, or wooden or fiberboard boxes with non-combustible inside containers.

(2) Ammonium nitrate or nitro carbo nitrate in non-rigid combustible containers may be stowed in proximity to these explosives if the two are separated by a steel deck or bulkhead, or a fire retardant wooden bulkhead built to the specifications of § 146.09-2, sheathed on

the oxidizing materials stowage side with one-inch asbestos board. The oxidizing materials must be stowed in accordance with § 146.22-30(f).

(c) Oxidizing materials shall not be stowed in the same hold or compartment with inflammable liquids.

(d) Oxidizing materials shall not be stowed in the same hold or compartment with inflammable solids.

(e) For regulations pertaining to the stowage of ammonium nitrate and ammonium nitrate fertilizers see §§ 146.22-30 and 146.22-100.

(f) Oxidizing materials shall not be stowed in the same hold or compartment with readily combustible materials such as combustible liquids and textile products or with finely divided substances such as organic powder, etc.

(g) Oxidizing materials shall not be stowed in the same hold or compartment with corrosive liquids.

(h) Oxidizing materials shall not be stowed in the same hold or compartment over cylinders of non-inflammable compressed gases.

(i) Oxidizing materials shall not be stowed in a hold or compartment containing sulfur in bulk nor in any hold or compartment above, below or adjacent to one containing sulfur in bulk.

(j) Oxidizing materials shall not be stowed in the same hold or compartment with cotton, nor in the hold or compartment above or below one containing cotton.

[CGFR 59-14, 24 F.R. 5272, June 30, 1959, as amended, CGFR 60-33, 25 F.R. 5238, June 11, 1960; CGFR 64-20, 29 F.R. 6792, May 23, 1964; CGFR 65-17, 30 F.R. 7441, June 5, 1965]

## § 146.22-20 Stowage of charcoal.

In the stowage of charcoal the following conditions shall be complied with:

(a) Before stowing charcoal the compartment or hold in which the charcoal is to be stowed shall be swept broom clean. Any residue of a former cargo, such as and including products of petroleum, vegetable or animal oils, nitrate, or sulfur, shall be carefully cleaned up and the charcoal protected by clean dunnage from coming in contact with any such residue.

(b) (1) Charcoal packed in bags and offered for transportation aboard vessels in quantities of more than 1 ton shall be so loaded that the bags are laid horizontally and so packed that there will

be space for efficient air circulation. If the bags are not compactly filled and closed so as to avoid free space within, dunnage strips shall be laid between the bags both vertically and horizontally. Space for ventilating shall be maintained in the way of bulkheads, the shell of the vessel, the under deck, and the overhead deck.

(2) When stowage space permits, not more than 40 tons of charcoal shall be stowed in any one compartment or hold. If the arrangements of hold space require the stowage of larger tonnage, the arrangement for ventilating should be increased to assure sufficient venting effect.

(c) Broken bags shall be refused and loose material from broken bags accumulating in the hold during loading shall be removed. Bags may be repacked or have new closing means provided and then stowed.

(d) Charcoal "Screenings" packed in bags shall be so stowed as to provide spaces for air circulation between tiers regardless of the quantity being transported.

[CGFR 52-41, 17 F.R. 10312, Nov. 13, 1952]

#### § 146.22-25 Exemptions for inflammable solids and oxidizing materials.

(a) Inflammable solids and oxidizing materials, except those enumerated in paragraph (d) of this section, when packed in inside containers not over 1 pound net weight each, packaged in outside containers not exceeding 25 pounds net weight each are exempt from specification packaging, marking other than name of contents, and labeling requirements, unless otherwise provided by the regulations in this part.

(b) Liquid or solid organic peroxides, except acetyl benzoyl peroxide, solid, and benzoyl peroxide, are, unless otherwise provided, exempt from specification packaging, marking other than name of contents, and labeling requirements, when packed in:

(1) Strong outside containers having not over 1 pint or 1 pound net weight of the material in any one outside package with inside containers securely packed and cushioned with incombustible cushioning material. Cushioning material is not required when the liquid

is contained in strong, securely closed plastic containers not over 1 ounce capacity each, properly packaged to prevent breakage or leakage.

(2) Strong outside containers having not more than 24 inside fiberboard containers each containing not more than 70 chemically resistant closed plastic tubes having fluid capacity not over ½ ounce each and securely packed in incombustible cushioning material. No one inside fiberboard container shall have more than 1 pint of liquid.

(c) Such limited quantity shipments may be accepted on board all vessels subject to the regulations in this part provided the bill of lading or other shipping paper correctly describes the article in accordance with the true name as shown in the commodity list. Stowage shall be "On deck under cover" or "Tween decks" in a compartment not subject to artificial heat.

(d) The provisions of paragraphs (a) and (b) of this section do not extend to shipments of the following inflammable solids and oxidizing materials:

Acetyl benzoyl peroxide, solution.  
Aircraft rocket engines (commercial).  
Aircraft rocket engine igniters (commercial).  
Bags, nitrate of soda, empty and unwashed.  
Barium azide, 50 percent or more water, wet.  
Benzoyl peroxide.  
Burnt cotton.  
Calcium chlorite.  
Calcium phosphide.  
Calcium, metallic, crystalline.  
Calcium resinate.  
Calcium resinate (fused).  
Carbopropoxide, unstabilized.  
Charcoal, wood, screenings.  
Chlorine dioxide hydrate, frozen.  
Chlorobenzoyl peroxide (para).  
Coal, ground bituminous, sea coal and coal facings.  
Cobalt resinate, precipitated.  
Cotton waste, oily.  
Cyclohexanane peroxide over 50% concentration but not exceeding 85% concentration.  
Decaborane.  
Dimethylhexane dihydroperoxide.  
Fiber, burnt.  
Fibers or fabrics, oily.  
Fish scrap or fish meal.  
Hafnium metal, dry.  
Hafnium metal, wet.  
Hair, wet.  
Iron sponge.  
Isopropyl percarbonate, unstabilized.  
Lithium aluminum hydride.

#### § 146.22-30 Authorization to load or discharge ammonium nitrate and ammonium nitrate fertilizers.

(a) Ammonium nitrate, ammonium nitrate fertilizers and fertilizer mixtures packed in paper bags or other combustible containers, except those types exempt by this section, in amounts exceeding the 1,000 pounds test sample required by paragraph (e) of this section shall not be laden on or discharged from any vessel at any point or place in the United States, its territories or possessions not including the Panama Canal Zone, until a permit authorizing such loading or discharging has been obtained by the owner, agent, charterer, master or person in charge of the vessel from the Coast Guard District Commander or his authorized representative. The Coast Guard officer issuing the permit shall satisfy himself that no local regulations or rules will be violated by the issuance of such permit. This permit requirement shall not apply to ammonium nitrate, ammonium nitrate fertilizers and fertilizer mixtures loaded in railroad or highway vehicles offered for transportation on board vessels under the provisions of §§ 146.08-1 thru 146.08-55.

(b) (1) Ammonium nitrate, organic coated, in paper or burlap bags shall be loaded or discharged at facilities so remotely situated from populous areas and/or high value or high hazard industrial facilities, that in the event of fire or explosion, loss of lives and property may be minimized.

(i) This facility shall conform with port security and local regulations and shall provide an abundance of water for fire fighting.

(ii) This facility shall be so located as to permit unrestricted passage to open water. The vessel shall be moored bow to seaward, and shall be maintained in a mobile status either by presence of tugs or readiness of engines. The vessel shall provide at the bow and stern a wire towing hawser having an eye splice and lowered to the water's edge.

(iii) The detailed requirements of § 146.22-100 pertaining to this product, and other applicable sections of this part shall be strictly adhered to.

Lithium ferro silicon.  
Lithium hydride.  
Lithium metal.  
Lithium silicon.  
Matches, strike-anywhere.  
Motion-picture film (exposed) and motion-picture film scrap (nitrocellulose base).  
Motion-picture film, old and worn out (nitrocellulose base).  
Nickel catalyst, finely divided, activated or spent.  
Paper stock, wet.  
Paper waste, wet.  
Phosphoric anhydride.  
Phosphorus, amorphous, red.  
Phosphorus pentachloride.  
Phosphorus sesquioxide.  
Phosphorus, white or yellow.  
Photographic film scrap.  
Picric acid, wet, exceeding 16 ounces.  
Potassium, metallic, and potassium, metallic liquid alloy.  
Potassium peroxide.  
Pyroxylin plastic scrap.  
Rags, oily.  
Rags, wet.  
Sodium aluminum hydride.  
Sodium amide.  
Sodium chlorite.  
Sodium hydride.  
Sodium, metallic, and sodium, metallic liquid alloy.  
Sodium metallic, dispersion in organic solvent.  
Sodium peroxide.  
Sodium picramate.  
Sodium potassium alloys.  
Spent iron mass or spent iron sponge.  
Spent oxide.  
Tankage, garbage, tankage, fertilizers.  
Tankages, rough ammoniate.  
Tetranitromethane.  
Textile waste, wet.  
Thorium metal, powdered.  
Titanium metal powder, wet.  
Urea nitrate, wet, over 16 ounces.  
Wool waste, wet.  
X-ray film (exposed) and X-ray film scrap (nitrocellulose base).  
Zinc ammonium nitrate.  
Zirconium metal, dry.  
Zirconium metal, wet.  
Zirconium picramate.

[CGFR 52-41, 17 F.R. 10311, Nov. 13, 1952, as amended by CGFR 53-54, 18 F.R. 8235, Dec. 16, 1953; CGFR 54-16, 19 F.R. 4932, Aug. 6, 1954; CGFR 57-33, 22 F.R. 8628, Oct. 29, 1957; CGFR 57-49, 22 F.R. 10061, Dec. 14, 1957; CGFR 58-48, 23 F.R. 9637, Dec. 12, 1958; CGFR 60-33, 25 F.R. 5238, June 11, 1960; CGFR 61-44, 26 F.R. 11020, Nov. 23, 1961; CGFR 62-11, 27 F.R. 5283, June 5, 1962; CGFR 63-19, 28 F.R. 5381, May 30, 1963; CGFR 64-20, 29 F.R. 6792, May 23, 1964; CGFR 60-84, 29 F.R. 18164, Dec. 22, 1964]

(2) Ammonium nitrate, organic coated, packaged in substantial metal barrels or drums, may be handled in accordance with paragraph (c) of this section. A permit is required for this transaction.

(c)(1) Ammonium nitrate and ammonium nitrate products (prills, crystals, grains or flakes) containing 90 percent or more ammonium nitrate by weight with no organic coating, including fertilizer grade, dynamite grade, nitrous oxide grade and technical grade, and ammonium nitrate phosphate (60 percent or more ammonium nitrate by weight) with no organic coating, packaged in multi-wall paper bags or other combustible containers, shall be loaded or discharged at facilities removed from congested areas and/or those having high value or high hazard industrial facilities. A permit is required for this transaction.

(i) This facility shall conform with port security and local regulations and shall provide an abundance of water for fire fighting.

(ii) This facility shall be so located as to permit unrestricted passage to open water. The vessel shall be moored bow to seaward, and shall be maintained in a mobile status either by presence of tugs or readiness of engines. The vessel shall provide at the bow and stern a wire towing hawser having an eye splice and lowered to the water's edge.

(iii) The detailed requirements of § 146.22-100 pertaining to these products and other applicable sections of this part shall be strictly adhered to.

(2) Ammonium nitrate and ammonium nitrate products (prills, crystals, grains or flakes) containing 90 percent or more ammonium nitrate by weight with no organic coating, including fertilizer grade, dynamite grade, nitrous oxide grade and technical grade, and ammonium nitrate phosphate (60 percent or more ammonium nitrate by weight) with no organic coating, packaged in ICC or nonspecification metal barrels or drums may be loaded or dis-

charged at any waterfront facility which conforms to port security and local regulations. No permit is required for this transaction. The ICC or nonspecification metal barrels or drums may contain the ammonium nitrate products packaged in ICC approved plastic bags or the metal barrels or drums may contain an ICC approved plastic liner.

(d)(1) Ammonium nitrate-carbonate mixtures (60 percent or less ammonium nitrate by weight) may be loaded or discharged at any waterfront facility which conforms to port security and local regulations and provides an abundance of water for fire fighting. No permit is required for this transaction. The detailed requirements of § 146.22-100 pertaining to these products, and applicable sections of this part shall be strictly adhered to.

(2) Ammonium nitrate mixed fertilizers (over 13 percent but less than 60 percent ammonium nitrate by weight) including ammonium nitrate phosphate and ammonium nitrate phosphate fertilizers containing less than 60 percent ammonium nitrate by weight with no organic fillers may be loaded or discharged at any waterfront facility which conforms to port security and local regulations and provides an abundance of water for fire fighting. No permit is required for this transaction. The detailed requirements of § 146.22-100 pertaining to these products, and applicable sections of this part shall be strictly adhered to.

(3) Ammonium nitrate fertilizer materials containing 60 percent or more by weight of ammonium nitrate and those products not otherwise described in this section shall be tested as prescribed in paragraph (e).

(e) A person desiring to import or export ammonium nitrate materials and formulations not conforming to any of the classes listed in this section, or described in § 146.22-100, shall make application for a permit to the U.S. Coast Guard. A sample of 1,000 lbs. of the material in bags as prepared for shipment shall be furnished at least 60 days

prior to intended date of shipment. Import shipments of this sample shall be made as required for "Nitrates, N.O.S." This sample shall be tested by a competent laboratory designated by the Coast Guard to determine whether the characteristics of the material require its classification as a dangerous article for purposes of transportation. After such tests, conditions of loading, discharging and transportation shall be prescribed by the Commandant of the Coast Guard. Costs of such tests shall be borne by the shipper.

(f) Ammonium nitrate formulations shipped in paper or burlap bags shall be stowed in conformity with the following general plan:

(1) Minimum dunnage and sweatboards shall be used in ships' holds to prevent friction or abrasion of bags and to allow for circulation of air and access of water in the event of fire.

(2) The bags may be stowed from side to side, out to sweatboards.

(3) A space of 18 inches shall be provided between transverse bulkheads and the bagged cargo.

(4) An 18-inch athwartship trench shall be provided along the center line of the compartment, continuous from bottom to top.

(5) An 18-inch amidship trench shall be provided running fore and aft from bulkhead to bulkhead.

(6) Bags shall not be stowed closer than 18 inches from the overhead deck beams.

(7) The bags shall be stowed so as to provide vent flues 14 inches square at each corner of the hatch or in way of ventilators, continuous from top to bottom.

(8) Trenching shall be accomplished by alternating the direction of the bags in each tier (bulkheading). The master or person in charge of loading shall determine the amount of bracing and chocking necessary to prevent shifting of the bagged cargo adjacent to trench areas.

[CGFR 59-14, 24 F.R. 5272, June 30, 1959, as amended, CGFR 60-33, 25 F.R. 5238,

11, 1960; CGFR 62-48, 27 F.R. 12135, Dec. 7, 1962; CGFR 64-20, 29 F.R. 6793, May 23, 1964]

# § 146.22-35 Elemental phosphorus in water in bulk.

(a) Elemental phosphorus, white or yellow, in water may be carried in bulk only in inspected and certificated cargo barges, tank barges, or cargo vessels. For applicable requirements, see Part 98 of Subchapter I (Cargo and Miscellaneous Vessels) of this chapter.

[CGFR 58-9, 23 F.R. 4839, June 28, 1958]

# § 146.22-40 Nitro carbo nitrate.

(a) Nitro carbo nitrate packaged in strong metal cans, metal or fiber drums, barrels or kegs, and wooden or fiberboard boxes with non-combustible inside containers, may be loaded or discharged at any designated waterfront facility.

(b) Nitro carbo nitrate packaged in burlap bags, multi-wall paper bags or other non-rigid combustible containers shall be loaded or discharged at facilities so remotely situated from populous and congested areas and/or high value or high hazard industrial facilities that in the event of fire or explosion, loss of lives and property may be minimized. A permit authorizing such loading or discharging shall be obtained by the owner, agent, charterer, master or person in charge of the vessel from the Coast Guard District Commander or his authorized representative. Stowage shall be in conformity with § 146.22-30(f).

(1) This facility shall conform with port security and local regulations and shall provide an abundance of water for fire fighting.

(2) This facility shall be so located as to permit unrestricted passage to open water. The vessel shall be moored bow to seaward, and shall be maintained in a mobile status either by presence of tugs or readiness of engines. The vessel shall provide at the bow and stern a wire towing hawser having an eye splice and lowered to the water's edge.

[CGFR 60-33, 25 F.R. 5238, June 11, 1960, as amended, CGFR 64-20, 29 F.R. 6793, May 23, 1964]



§ 146.22-100 Table E—Classification:

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Aircraft rocket engines (commercial).	Aircraft rocket engines (commercial) are standby aircraft propulsion engines which are for civil aircraft installation only, comprising of a metal case containing a solid composite fuel other than one classified as an explosive and containing nonexplosive materials or elements. Rocket engine igniters are devices used to ignite the chemical mixture of rocket engines. These units are for aircraft use only. If approved by ICC, aircraft rocket engine igniters may be packed in the same outside shipping containers as the rocket engines provided the igniters are separately packaged in sealed metal containers in strong inside containers.	Yellow-----	Stowage: "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Wooden boxes: (ICC-15A, 15B, 15E, 16A). Igniters must be packaged in sealed metal containers approved by ICC and packed in wooden boxes as specified above when shipped separately from the aircraft rocket engines.
Aircraft rocket engine igniters (commercial).			Aircraft rocket engines and/or their igniters packed in any other manner than specified here must be in containers of a type approved by ICC.
Aluminum dross-----	Amorphous grey lumps, varying from powder to about 3 inch dimension. May contain some metallic aluminum. May evolve inflammable gas if wet. Must not be shipped when hot, or when containing moisture liable to cause heating or fire during transportation. Stow in dry, well-ventilated space.	No label required--	No other restrictions-----

## Inflammable solids and oxidizing materials.

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted-----	Not permitted-----	Not permitted.
No other restrictions-----	No other restrictions-----	No other restrictions.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Ammonium bichromate (ammonium dichromate).	Orange-red odorless crystals. Decomposed by heat. Will render organic substances easily inflammable. Do not breathe air laden with dust of this material. Soluble in water. Do not stow with acids (white label) or combustible materials. Stow well away from living quarters and foodstuffs.	Yellow	Stowage: "On deck protected." "On deck in open." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1,760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 400 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drum (ICC-21C) not over 400 lb. net wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt. May be packed and shipped as "Drugs, chemicals, medicines or cosmetics", which see.
Ammonium picrate, wet (when wet with not less than 10% of water and in a quantity not exceeding 16 ounces in one outside package).	In accepting shipments, observe outside containers carefully for signs of leakage. Refuse packages showing leakage or signs of having leaked.	No label required.	
Bags, nitrate of soda, empty and unwashed.	Burlap or other fiber bags used for shipment of nitrate of soda. Very inflammable due to impregnation with nitrate. Do not stow in same compartment with explosives, inflammable liquids (red label), combustible liquids or combustible materials.	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) not over 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) not over 400 lb. gr. wt.

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck in open." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1,760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 400 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drum (ICC-21C) not over 400 lb. net wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt. May be packed and shipped as "Drugs, chemicals, medicines or cosmetics", which see. Not permitted.	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1,760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 400 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drum (ICC-21C) not over 400 lb. net wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt. May be packed and shipped as "Drugs, chemicals, medicines or cosmetics", which see. Not permitted.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1,760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 400 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drum (ICC-21C) not over 400 lb. net wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt. May be packed and shipped as "Drugs, chemicals, medicines or cosmetics", which see. Not permitted.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Barium azide, wet (when wet with 50 percent or more water).	Barium compound suspended in water solution. In the dry state, this material is classified as a high explosive but is not sensitive in this respect when wet with 50% or more water. Toxic. Keep cool. Stow well away from steam pipes and other sources of heat. If the material is to be exposed to freezing weather, anti-freeze must be added to keep from freezing. In accepting shipments, observe outside containers carefully for signs of leakage of water content. Refuse leaking containers or ones showing signs of having leaked.	Yellow-----	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes: (ICC-15A, 15B, 15C, 16A, 19A) WIC glass not over 1 lb. cap. ea.
Barium peroxide (binoxide, dioxide)	A heavy grayish-white powder... Mixed with organic material or finely divided metals, it is dangerously inflammable and may be ignited by friction or may cause spontaneous ignition of such material. Poisonous if taken internally. Insoluble in water. Stow away from foodstuffs. Do not stow with combustible materials, explosives, or acids (white label). Keep cool and dry.	Yellow-----	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 880 lb. gr. wt. (ICC-6B, 6C) not over 1,400 lb. net wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.
Burnt cotton (not repicked): The originating bill of lading or other shipping paper must bear the shipper's certifying statement that the bales of cotton have not shown evidence of fire for a period of ten days. Note: When burnt cotton is repicked and rebaled it is not subject to this regulation and may be shipped as "Cotton."	Cotton that has been on fire and from which the burnt portions have not been removed by repicking. The principal hazard is that the fire may rekindle.	Yellow-----	Stowage: "On deck protected." "On deck in open." Outside containers: Not permitted unless securely baled.
Calcium chlorite-----	A strong oxidizing material in the form of crystals or crystalline powder. Mixed with organic material or finely divided metals it is dangerously ignitable and may be ignited by friction or may cause spontaneous ignition of such material. Soluble in water. Do not stow with charcoal, sulfur, sugar, flour, and similar finely divided substances. Do not stow in same compartment with explosives, acids (white label), inflammable liquids (red label) or combustible materials. Keep cool.	Yellow-----	Stowage: "On deck protected." "On deck under cover." "Under deck, but not over-stowed." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes, (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 pounds gr. wt.

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted-----	Not permitted-----	Not permitted.
Stowage: "On deck protected." "On deck under cover." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt.	Ferry stowage (AA)----- Outside containers: Steel barrels or drums: (ICC-6A) not over 880 lb. gr. wt. (ICC-6B, 6C) not over 1,400 lb. net wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 880 lb. gr. wt. (ICC-6B, 6C) not over 1,400 lb. net wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.
Not permitted-----	Not permitted-----	Not permitted.
Not permitted-----	Not permitted-----	Not permitted.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Calcium hypochlorite compounds, dry, containing more than 39 percent available chlorine.	<i>White powder. Decomposed by moisture. If exposed to excessive heat, or to the rays of the sun, it may decompose spontaneously evolving vapor with sufficient pressure to rupture container. The vapors from ruptured containers have been known to ignite spontaneously. When exposed it gives off pungent vapors (chlorine) that are corrosive. May destroy textiles. Do not stow in the same compartment with corrosive liquids (white label) nor with turpentine. Stow well away from foodstuffs, living quarters, and all sources of artificial heat. Keep dry and cool.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks." "Under deck, but not over-stowed." Outside containers: Steel barrels or drums: (ICC-6A, 6B, 6C) not over 55 gal. cap. (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt. Fiber drum (ICC-21C) WIL not over 400 lb. net wt.
Calcium, metallic.	<i>A highly inflammable solid in the form of gray, hard lumps with a lustrous silver-white surface when freshly cut. Decomposes water with evolution of hydrogen. Do not stow with explosives, inflammable liquids (red label) or acids (white label). Stow in a well ventilated compartment. Keep dry and cool.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 50 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. net wt. Plywood drums (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.
Calcium, metallic, crystalline.	<i>A highly inflammable solid in the metallic crystalline form. Decomposes water with evolution of hydrogen. Do not stow with explosives, inflammable liquids (red label) or acids (white label). Stow in a well ventilated compartment. Keep dry and cool.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A, 15B) WIMC, not over 250 lb. gr. wt. Metal barrels or drum (ICC-6A, 6B, 6C) not over 360 lb. gr. wt. Metal drums (ICC-17C, 17H) STC, not over 350 lb. gr. wt.

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A, 6B, 6C) not over 55 gal. cap. (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt. Fiber drum (ICC-21C) WIL not over 400 lb. net wt.	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-6A, 6B, 6C) not over 55 gal. cap. (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt. Fiber drum (ICC-21C) WIL not over 400 lb. net wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A, 6B, 6C) not over 55 gal. cap. (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt. Fiber drum (ICC-21C) WIL not over 400 lb. net wt.
Not permitted.	Not permitted.	Not permitted.
Not permitted.	Not permitted.	Not permitted.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Calcium peroxide.....	White to yellowish, odorless powder. Strong oxidizing agent. Decomposes on exposure to moist air. With acids forms hydrogen peroxide. Slightly soluble in water. Do not stow with explosives, combustible materials, or acids (white label).	Yellow.....	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 880 lb. gr. wt. (ICC-6B, 6C) not over 1400 lb. net wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.
Calcium phosphide.....	Solid gray lumps. Decomposes on contact with water or damp air, generating hydrogen phosphide, a spontaneously inflammable and poisonous gas. Do not stow over holds containing explosives or inflammable liquids. Do not stow in same compartment with compressed gases, inflammable liquids (red label) or acids (white label). Keep absolutely dry.	Yellow.....	Stowage: "On deck protected." "On deck under cover." Outside containers: Steel barrels or drums (ICC-6A, 6B, 6C) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. Wooden boxes (ICC-15A, 15B) lined with metal and with hermetically sealed inside containers, not over 250 lb. gr. wt.
Calcium resinate.....	Fine white powder with odor resembling rosin. Tends to heat spontaneously unless very carefully processed. Insoluble in water. Do not stow with explosives, combustible materials, or acids (white label).	Yellow.....	Stowage: "On deck protected." "On deck under cover." Outside containers: Steel barrels or drums: (ICC-6A, 6B, 6C) not over 55 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) with airtight metal inside containers, not over 250 lb. gr. wt.
Calcium resinate, fused..	Brownish colored lumps with odor resembling rosin. When lumps become broken into dust, tend to heat spontaneously. Insoluble in water. Do not stow with explosives, combustible materials or acids (white label).	Yellow.	
Cobalt resinate, precipitated.	Fine, brownish powder, with odor resembling rosin. Tends to heat spontaneously and ignite when exposed to air. Insoluble in water. Do not stow with explosives, combustible materials, or acids (white label).	Yellow.	

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck under cover." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt.	Ferry stowage (AA)..... Outside containers: Steel barrels or drums: (ICC-6A) not over 880 lb. gr. wt. (ICC-6B, 6C) not over 1400 lb. net wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 880 lb. gr. wt. (ICC-6B, 6C) not over 1400 lb. net wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.
Not permitted.....	Not permitted.....	Not permitted.
Not permitted.....	Not permitted.....	Not permitted.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Charcoal: The following requirement applies to shipments of all forms of charcoal: The originating bill of lading or other shipping paper shall bear the shipper's certifying statement that the charcoal is described by its proper shipping name as shown herein; conforms in all other respects to all of the applicable requirements as set forth in these regulations; and that the material has been prepared and packed under the conditions as set forth in the current I. C. C. regulations governing the substance.	Charcoal is an artificial carbon obtained by incomplete combustion of substances such as wood, bone, nut shell, vegetable or animal matter. It is shipped in the form of fine, very light, black powder, or in heavy grains or lumps or sticks. Case hardening compounds are usually wood charcoal together with such energizers as sodium or barium carbonates, cyanides, etc. Do not stow in the same compartment with explosives, inflammable liquids (red label), oxidizing materials (yellow label) or acids (white label), nor with oils or greases. Do not accept charcoal that shows signs of heat. Require a certifying statement from the shipper that the charcoal has been exposed to the air for the required period of time before shipping. Keep cool and dry. A more or less pure, powdered or granulated form of charcoal characterized by high absorptive capacity. Outside containers shall be marked "Charcoal, Activated."		
Charcoal, activated		No label required.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, not more than 4 bu. cap. Wooden barrels or kegs, WIC, wooden boxes WIC, not over 200 lb. gr. wt. Fiberboard boxes WIC, not over 65 lb. gr. wt. Siftproof paper bags or paperlined burlap (jute) bags, not more than 2½ bu. cap.

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted	Ferry stowage (AA). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, not more than 4 bu. cap. Wooden barrels or kegs, WIC, wooden boxes WIC, not over 200 lb. gr. wt. Fiberboard boxes WIC, not over 65 lb. gr. wt. Siftproof paper bags or paperlined burlap (jute) bags, not more than 2½ bu. cap.	Ferry stowage (BB). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, not more than 4 bu. cap. Wooden barrels or kegs, WIC, wooden boxes WIC, not over 200 lb. gr. wt. Fiberboard boxes WIC, not over 65 lb. gr. wt. Siftproof paper bags or paperlined burlap (jute) bags, not more than 2½ bu. cap.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Charcoal briquettes.....	<i>Briquettes made from wood charcoal with starch and water or tar for a binder. Such prepared charcoal no longer retains its fiery tendency, the pores being obstructed by the added material.</i>	No label required.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes. Unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap. NOTE: Charcoal briquettes may also be accepted in bulk on board cargo vessels.
Charcoal screenings made from "pinon" wood.	<i>Charcoal screenings consist of small pieces of charcoal varying from about ¼ inch in the maximum dimension to grains of dust.</i>	No label required.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Unlined burlap (jute) bags; strong, unlined cotton bags, not more than 4 bu. cap. *NOTE: Screenings made from pine wood charcoal must not be accepted for transportation unless the shipper certifies that the screenings have been stored in a dry place in loosely piled bags; freely exposed to the air for not less than 5 days after separation from the lump before shipment.
Charcoal, wood screenings, other than "Pinon" wood screenings.	<i>Small pieces or dust.</i>	Yellow.	Stowage: "On deck protected." "On deck under cover." Outside containers: Unlined burlap (jute) bags; strong, unlined cotton bags; not more than 4 bu. cap. *NOTE: Charcoal, wood screenings, other than pine wood screenings must not be accepted for transportation unless the shipper certifies that the screenings have been stored in a dry place in loosely piled bags, freely exposed to the air, for not less than twenty (20) days after separation from the lump before shipment.
Charcoal screenings, wet (wet charcoal screenings are not permitted transportation or storage on board any vessel).	<i>Charcoal screenings from wet charcoal, or wet screenings, or screenings which have been wetted since manufacture and not dried and exposed to the air for the required period of time.</i>		Not permitted.
Charcoal, shell.....	<i>Charcoal made from cocoanut shells, walnut shells, corn cobs, peach pits or similar materials.</i>	No label required.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes; unlined burlap (jute) bags; not more than 4 bu. cap. Paper-lined burlap (jute) bags; paper bags, not more than 2½ bu. cap.

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes. Unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap. NOTE: Charcoal briquettes may also be accepted in bulk in highway vehicles which show no signs of sifting.	Ferry stowage (AA). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes. Unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap. NOTE: Charcoal briquettes may also be accepted in bulk in highway vehicles which show no signs of sifting.	Ferry stowage (BB). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes. Unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap. NOTE: Charcoal briquettes may also be accepted in bulk in railroad freight cars or highway vehicles which show no signs of sifting.
Not permitted.	Ferry stowage (AA). Outside containers: Unlined burlap (jute) bags; strong, unlined cotton bags, not more than 4 bu. cap. *NOTE: Screenings made from pine wood charcoal must not be accepted for transportation unless the shipper certifies that the screenings have been stored in a dry place in loosely piled bags; freely exposed to the air, for not less than 5 days after separation from the lump before shipment.	Ferry stowage (BB). Outside containers: Unlined burlap (jute) bags; strong, unlined cotton bags, not more than 4 bu. cap. *NOTE: Screenings made from pine wood charcoal must not be accepted for transportation unless the shipper certifies that the screenings have been stored in a dry place in loosely piled bags; freely exposed to the air, for not less than 5 days after separation from the lump before shipment.
Not permitted.	Ferry stowage (AA). Outside containers: Unlined burlap (jute) bags; strong, unlined cotton bags; not more than 4 bu. cap. *NOTE: Charcoal, wood screenings, other than pine wood screenings must not be accepted for transportation unless the shipper certifies that the screenings have been stored in a dry place in loosely piled bags, freely exposed to the air, for not less than twenty (20) days after separation from the lump before shipment.	Ferry stowage (BB). Outside containers: Unlined burlap (jute) bags; strong, unlined cotton bags; not more than 4 bu. cap. *NOTE: Charcoal, wood screenings, other than pine wood screenings must not be accepted for transportation unless the shipper certifies that the screenings have been stored in a dry place in loosely piled bags, freely exposed to the air, for not less than twenty (20) days after separation from the lump before shipment.
Not permitted.	Not permitted.	Not permitted.
Stowage: "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes; unlined burlap (jute) bags; not more than 4 bu. cap. Paper-lined burlap (jute) bags; paper bags, not more than 2½ bu. cap.	Ferry stowage (AA). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes; unlined burlap (jute) bags; not more than 4 bu. cap. Paper-lined burlap (jute) bags; paper bags, not more than 2½ bu. cap.	Ferry stowage (BB). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes; unlined burlap (jute) bags; not more than 4 bu. cap. Paper-lined burlap (jute) bags; paper bags, not more than 2½ bu. cap. In bulk in tight railroad freight cars or highway vehicles which show no signs of sifting.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Charcoal, wet (wet charcoal is not permitted transportation or storage on board any vessel)	<i>Charcoal in any form, that is wet or that has been wetted since manufacture and not dried and exposed to the air for the required period of time.</i>		Not permitted.
Charcoal, wood, crushed, granulated, ground or pulverized	<i>Crushed, granulated, ground or pulverized charcoal is prepared from either lump charcoal or charcoal screenings.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, not more than 4 bu. cap. Wooden barrels or kegs WIC, wooden boxes WIC, not over 200 lb. gr. wt. Fiberboard boxes WIC, not over 65 lb. gr. wt. Siftproof paper bags or paper-lined burlap (jute) bags, not more than 2½ bu. cap.
Charcoal, wood, lump (lump wood charcoal must be dry and free from screenings and brands).	<i>Lump wood charcoal free from screenings.</i>	No label required.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap.
<i>Chlorates</i> Barium chlorate. Calcium chlorate. Chlorates, N. O. S. Potassium chlorate. Bhlorate of potash. Sodium chlorate. Chlorate of soda. Strontium chlorate. Zinc chlorate.	<i>Chlorates are in the form of colorless crystals or the powder thereof and are strong oxidizing agents.</i> <i>Chlorates mixed with organic matter form very inflammable compositions, and frequently act as high explosives when mixed with finely divided organic material or finely divided metals.</i> <i>Mixtures of chlorates with organic matter or finely divided materials may be ignited by friction.</i> <i>All chlorates when brought in contact with sulfuric acid are liable to cause fire or explosion.</i> <i>Chlorates mixed with ammonium salts are liable to spontaneous decomposition and ignition.</i> <i>Soluble in water.</i> Chlorates should not be stowed in the same compartment with explosives, acids (white label), inflammable liquids (red label) or combustible materials such as cotton, charcoal, sulfur, etc.	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-11A, 11B), WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A), WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B), WIC, not over 25 lb. net wt. Fiber drum (ICC-21C) WIMC ICC-2F not over 250 lb. gr. wt. Plywood drums (ICC-22A, 22B) WIMC ICC-2F not over 225 lb. net wt. Authorized only for chlorate of soda: Tank cars complying with ICC regulations.
<i>Chlorates, wet</i> Barium chlorate, wet. Chlorates, N. O. S. wet. Strontium chlorate, wet.	<i>Chlorates wet with 10% or more of water, equally distributed therein.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Tank cars complying with ICC regulations.

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.	Not permitted.	Not permitted.
Not permitted.	Ferry stowage (AA). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, not more than 4 bu. cap. Wooden barrels or kegs WIC, wooden boxes WIC, not over 200 lb. gr. wt. Fiberboard boxes WIC, not over 65 lb. gr. wt. Siftproof paper bags or paper-lined burlap (jute) bags, not more than 2½ bu. cap.	Ferry stowage (BB). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, not more than 4 bu. cap. Wooden barrels or kegs WIC, wooden boxes WIC, not over 200 lb. gr. wt. Fiberboard boxes WIC, not over 65 lb. gr. wt. Siftproof paper bags or paper-lined burlap (jute) bags, not more than 2½ bu. cap.
Stowage: "On deck protected." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap.	Ferry stowage (AA). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap. May also be accepted in bulk in tight highway vehicles which show no signs of sifting.	Ferry stowage (BB). Outside containers: Tight wooden barrels or kegs, tight wooden boxes, fiberboard boxes, unlined burlap (jute) bags, strong, unlined cotton bags, not more than 4 bu. cap. Paper-lined burlap (jute) bags, paper bags, not more than 2½ bu. cap. May also be accepted in bulk in tight railroad freight cars or highway vehicles which show no signs of sifting.
Not permitted.	Not permitted.	Not permitted.
Not permitted.	Not permitted.	Ferry stowage (BB). Outside containers: Tank cars complying with ICC regulations.



Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Chlorate and borate mixtures. Chlorate and magnesium chloride mixtures. NOTE: Such mixtures containing 28% or less chlorate and no other hazardous additives are not subject to the regulations in this part.	Mixtures of chlorates and borates or magnesium chloride in varying proportions containing no other hazardous additives.	Yellow	<p>Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible."</p> <p>Outside containers: Mixtures containing 50% or more chlorate may be accepted in: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STO, not over 55 gal. cap.</p> <p>Wooden barrels or kegs: (ICC-11A, 11B) WIC, not over 50 gal. cap.</p> <p>Wooden boxes: (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 280 lb. gr. wt.</p> <p>Fiberboard boxes: (ICC-12B) WIMC, not over 25 lb. net wt.</p> <p>Fiber or plywood drums: (ICC-21A, 21B, 22A, 22B) WIMO ICC-2F, not over 220 lb. gr. wt.</p> <p>Mixtures containing more than 28% chlorate but less than 50% may also be accepted in: Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) WIL, not over 600 lb. net wt.</p> <p>Wooden boxes: (ICC-15A, 15B) WIL, not over 280 lb. gr. wt.</p> <p>Strong fiberboard boxes, WIC not over 4 lb. net wt. each, or ICC-2D bags not over 10 lb. net wt. each; gr. wt. of box not over 65 lb.</p> <p>Fiber or plywood drums: (ICC-21A, 21B, 22A) not over 220 lb. gr. wt.</p> <p>Multiwall paper bags: (ICC-44C, 44D) not over 50 lb. net wt.</p>

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted	Not permitted	Not permitted.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Chlorine dioxide hydrate, frozen. Chromic acid Chromic anhydride. Chromium trioxide.	An oxidizing material in the form of red flakes, or may be ground. Can irritate skin or mucous membranes. Avoid breathing dust or contact with skin. Soluble in water. Reactive with many organic substances. Reaction generates heat, and ignition may occur. Do not stow in same compartment with explosives, inflammable liquids (red label), acids (white label), or combustible materials.	Yellow	Not permitted.  Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B), WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12A) WIC, not over 20 lb. net wt. (ICC-12B) WIMC, not over 65 lb. gr. wt.
Coal facings Ground bituminous coal. Sea coal.	Coal facings (foundry facing) is a term applied to ground or pulverized coal used in foundries in preparation of the molds. Ground bituminous coal is the name applied to bituminous coal that has been finely ground or pulverized for use as fuel. Sea coal is a term of Scottish origin, originally applied to coal mined at seaboard or from under the sea and in this country today is applied to differentiate between bituminous coal (soft coal) and anthracite coal. Ground bituminous coal and foundry facings are sometimes termed "Sea Coal." Coal in this form is liable to spontaneous heating under favorable conditions, especially if of high sulfur content. By storing the more finely ground material for some days after grinding before shipment, spontaneous heating is greatly reduced.	Yellow	Stowage: "On deck protected." "On deck under cover." Outside containers: Hermetically sealed metal-lined wooden boxes. Airtight metal containers, not over 300 lb. gr. wt.

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.	Not permitted.	Not permitted.
Stowage: "On deck protected." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. Wooden boxes (ICC-15A, 15B) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12A) WIC, not over 20 lb. net wt. (ICC-12B) WIMC, not over 65 lb. gr. wt.	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12A) WIC, not over 20 lb. net wt. (ICC-12B) WIMC, not over 65 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12A) WIC, not over 20 lb. net wt. (ICC-12B) WIMC, not over 65 lb. gr. wt.
Not permitted.	Not permitted.	Ferry stowage (BB). Outside containers: Hermetically sealed metal-lined wooden boxes. Airtight metal containers, not over 300 lb. gr. wt.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Compounds, tree or weed killing, solid.	Do not stow with combustible materials, explosives or acids (white label).	Yellow-----	<p>Stowage:            "On deck protected."            "On deck under cover."            "Tween decks readily accessible."</p> <p>Outside containers:            Steel barrels or drums:            (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            Wooden barrels or kegs:            (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt.            (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt.            Wooden boxes:            (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt.            Fiberboard boxes:            (ICC-12A, 12B) WIC, not over 65 lb. gr. wt.            Fiber drums (ICC-21C) not over 250 lb. gr. wt.            Plywood drums:            (ICC-22A) not over 220 lb. gr. wt.            (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>
Cotton waste, oily (with more than 5% animal or vegetable oil).	Fibers of vegetable or animal origin impregnated with more than 5% of animal or vegetable oil.	Yellow-----	<p>Stowage:            "On deck protected."            "On deck under cover."</p> <p>Outside containers:            Hermetically sealed metal-lined wooden boxes or air-tight metal containers.</p>
Fibers or fabrics, with animal or vegetable oil. Rags, oily. Decaborane-----	Includes oiled or treated paper or textiles not manufactured into finished articles. Colorless needles. When heated to decomposition, it may emit toxic fumes and may explode. Keep cool.	Yellow-----	<p>Stowage:            "On deck protected."            "On deck under cover."</p> <p>Outside containers:            Metal barrels or drums:            (ICC-6A, 6B, 6C) not over 55 gal. cap.            (ICC-17C, 17E, 17H, 37A, 37B) STC not over 55 gal. cap.            Fiberboard box (ICC-12B) WIC, not over 65 lb. gr. wt.</p>
Dichloroisocyanuric acid, dry, containing more than 39% available chlorine. Trichloroisocyanuric acid, dry, containing more than 39% available chlorine.	White crystalline powder or granules. Hygroscopic. Up to 70% available chlorine. Keep dry and cool. White crystalline powder or granules. Hygroscopic. Up to 90% available chlorine. Keep dry and cool.	Yellow-----	<p>Stowage:            "On deck protected."            "On deck under cover."            "Tween decks."            "Under deck, but not over-stowed."</p> <p>Outside containers:            Steel barrels or drums:            (ICC-6A, 6B, 6C) not over 55 gal. cap.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap.            Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt.            Fiber drum (ICC-21C) WIL, not over 400 lb. net wt.</p>

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
<p>Stowage:            "On deck under cover."            "Tween decks readily accessible."</p> <p>Outside containers:            Steel barrels or drums:            (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            Wooden barrels or kegs:            (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt.            (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt.            Wooden boxes:            (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt.            Fiberboard boxes:            (ICC-12A, 12B) WIC, not over 65 lb. gr. wt.            Fiber drums (ICC-21C) not over 250 lb. gr. wt.            Plywood drums:            (ICC-22A) not over 220 lb. gr. wt.            (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>	<p>Ferry stowage (AA).-----            Outside containers:            Steel barrels or drums:            (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            Wooden barrels or kegs:            (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt.            (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt.            Wooden boxes:            (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt.            Fiberboard boxes:            (ICC-12A, 12B) WIC, not over 65 lb. gr. wt.            Fiber drums (ICC-21C) not over 250 lb. gr. wt.            Plywood drums:            (ICC-22A) not over 220 lb. gr. wt.            (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>	<p>Ferry stowage (BB).-----            Outside containers:            Steel barrels or drums:            (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. and not exceeding 880 lb. gr. wt.            Wooden barrels or kegs:            (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt.            (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt.            Wooden boxes:            (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt.            Fiberboard boxes:            (ICC-12A, 12B) WIC, not over 65 lb. gr. wt.            Fiber drums (ICC-21C) not over 250 lb. gr. wt.            Plywood drums:            (ICC-22A) not over 220 lb. gr. wt.            (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>
Not permitted-----	Not permitted-----	Ferry stowage (BB).----- Outside containers: Hermetically sealed metal-lined wooden boxes or air-tight metal containers.
Not permitted-----	Not permitted-----	Not permitted.
<p>Stowage:            "On deck under cover."            "Tween decks readily accessible."</p> <p>Outside containers:            Steel barrels or drums:            (ICC-6A, 6B, 6C) not over 55 gal. cap.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap.            Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt.            Fiber drum (ICC-21C) WIL, not over 400 lb. net wt.</p>	<p>Ferry stowage (AA).-----            Outside containers:            Steel barrels or drums:            (ICC-6A, 6B, 6C) not over 55 gal. cap.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap.            Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt.            Fiber drum (ICC-21C) WIL, not over 400 lb. net wt.</p>	<p>Ferry stowage (BB).-----            Outside containers:            Steel barrels or drums:            (ICC-6A, 6B, 6C) not over 55 gal. cap.            (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap.            Strong outside wooden or fiberboard packages with inside containers of glass not over 5 lb. cap. each, or with metal containers or plastic bottles not over 10 lb. cap. each. Outside wooden containers not to exceed 150 lb. gr. wt. and outside fiberboard containers not to exceed 65 lb. gr. wt.            Fiber drum (ICC-21C) WIL, not over 400 lb. net wt.</p>

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Drugs, chemicals, medicines, or cosmetics, N. O. S. When packed in accordance with ICC requirements for the particular substance, and separated and cushioned by incombustible absorbent material when the characteristics of the substance so require. (See § 146.22-25 for exemptions.)	<i>Any substance or a compound classified as an inflammable solid or an oxidizing material in accordance with the definitions contained herein, when prepared, packed and offered to the trade as drugs, chemicals, medicines, or cosmetics.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1700 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.
Fiber, burnt	<i>Fibers of vegetable or animal origin that have been involved in a fire.</i>	Yellow	Stowage: "On deck in open." Outside containers: Hermetically sealed metal-lined wooden boxes or airtight metal containers.
Fish scrap or fish meal (containing less than 6% or more than 12% moisture).	<i>Fish scrap or fish meal consists of ground and dried fish residue. Liable to spontaneous heating, and ignition.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." Outside containers: Airtight metal containers
Hair, wet	<i>Hair that has been wetted by rain or other moisture. Liable to spontaneous heating.</i>	Yellow	Stowage: "On deck in open." "On deck protected." "On deck under cover." "Tween decks." Outside containers: Tight metal barrels or drums, not over 1700 lb. gr. wt.

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1700 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1700 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1700 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.
Not permitted	Not permitted	Ferry stowage (BB). Outside containers: Hermetically sealed metal-lined wooden boxes or airtight metal containers.
Not permitted	Not permitted	Ferry stowage (BB). Outside containers: Airtight metal containers.
Not permitted	Ferry stowage (AA). Outside containers: Highway vehicles having metal bodies.	Ferry stowage (BB). Outside containers: Gondola cars.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<p>Hafnium metal, dry (in an atmosphere of inert gas, mechanically produced, finer than 270 mesh particle size or chemically produced, finer than 20 mesh particle size).</p> <p>NOTE 1: Hafnium metal, mechanically produced, coarser than 270 mesh particle size and chemically produced coarser than 20 mesh particle size in strong tight containers is not subject to the regulations in this table.</p> <p>NOTE 2: Chemically produced signifies produced by means other than attrition or grinding.</p> <p>NOTE 3: Any product containing 10% or more, particle size specified, shall be subject to these regulations.</p> <p>Hafnium metal, wet (mechanically produced finer than 270 mesh particle size or chemically produced finer than 20 mesh particle size with a minimum of 25% water by weight). Shipping containers shall have marked thereon the gross, tare and net weight of the package.</p> <p>NOTE 1: Any product containing less than 25% water by weight is considered dry for purposes of these regulations.</p> <p>NOTE 2: Any product containing 10% or more hafnium metal, particle size specified, shall be subject to these regulations.</p>	<p><i>An inflammable, amorphous, black powder or grayish brittle, lustrous lumps. Insoluble in water. Do not stow with combustible materials, explosives or acids (white label).</i></p> <p><i>Hafnium powder, wet with water, or in water. Check gross weight of container to be certain no leakage has occurred. Refuse leaking containers, or those showing signs of having leaked. If the material is to be exposed to freezing weather, antifreeze must be added to keep from freezing.</i></p>	<p>Yellow-----</p> <p>Yellow-----</p>	<p>Stowage: "On deck protected." "On deck under cover." Outside containers: Metal barrels or drums: (ICC-8A, 6B, 6C) WIMC ICC-2R, not over 150 lb. net wt. (ICC-17C, 17H, 37A) 8TC WIMC ICC-2R, not over 150 lb. net wt.</p>
			<p>Stowage: "On deck protected." "On deck under cover." Outside containers: Metal barrels or drums: (ICC-8A, 6B, 6C) WIMC ICC-2A not over 10 lb. net wt. ea., total not over 150 lb. net wt. Wooden boxes: (ICC-15A, 15B) WIMC ICC-2A not over 10 lb. net wt. ea., total not over 40 lb. net wt. Wooden kegs (ICC-10A) not over 75 lb. net wt.</p>

Solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted-----	Not permitted-----	Not permitted.
Not permitted-----	Not permitted-----	Not permitted.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Inflammable solids, N. O. B. Flammable solids, N. O. S.	May be any substance classifying as an inflammable solid in accordance with the definitions contained in these regulations, provided such inflammable solid is not otherwise specified by name in these regulations. Stow separate from all combustible materials, explosives, inflammable liquids (red label), or acids (white label).	Yellow-----	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. net wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt. (See Note in columns 5, 6, and 7.

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.	Ferry stowage (AA).----- Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.

Note: Specification containers shall be of a design and construction of material that will not react dangerously with nor be decomposed by the chemical packed therein.

Table E—Classification: Inflammable solids

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Iron sponge <i>not properly oxidized</i> . (When properly prepared and shipped in metal containers it is not subject to these regulations)	Iron sponge or iron mass that has not been properly oxidized during manufacture which is liable to spontaneous heating and ignition. Stow separate from all combustible materials, explosives, inflammable liquids (red label) or acids (white label).	Yellow	Stowage: "On deck protected." "On deck in open." "On deck under cover." "Tween decks readily accessible." Outside containers: Hermetically sealed metal-lined wooden boxes. Airtight metal containers.
Iron mass, spent. Iron sponge, spent. Spent oxide.	Iron sponge or mass after saturation with sulfur, when used in gas purification, is liable to spontaneous heating and ignition if stowed in deep piles. No marking required.	No label required	After exposure to air for a period of not less than 10 days it may be accepted for transportation in bulk in all steel barges having open holds.
Isopropyl percarbonate, unstabilized. Lacquer base, or lacquer chips, dry (nitrocellulose base).	Lacquer chips are composed of nitrocellulose incorporated with a plasticizer and in the form of thin irregular-shaped pieces. Such chips are the film-forming part of lacquer which remains after the solvents or thinners have evaporated. Involved in a fire the products of decomposition, if inhaled, are irritating and poisonous even in small concentrations. Provide cool stowage as in a compartment having a temperature of not exceeding 100° F., well away from any source of heat, or in position to protect or move, even to jettisoning in event of fire. Do not stow in same compartment with explosives, inflammable liquids (red label) other inflammable solids or oxidizing materials (yellow label) or acids (white label).	Yellow	Not permitted. Stowage: "On deck protected." "On deck in open." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIMC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.

and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.	Ferry stowage (AA). Outside containers: Hermetically sealed metal-lined wooden boxes. Airtight metal containers.	Ferry stowage (BB). Outside containers: Hermetically sealed metal-lined wooden boxes. Airtight metal containers.
Not permitted.	Not permitted.	Not permitted.
Not permitted.	Not permitted.	Not permitted.
Stowage: "On deck in open." "On deck under cover." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIMC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIMC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIMC, not over 250 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Lithium aluminum hydride.	Light porous white powder. Decomposes to lithium hydride, aluminum metal and hydrogen above 130° C. without melting. Do not stow with explosives. Inflammable liquids (red label) or acids (white label). Keep cool and dry.	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A, 15B), with hermetically sealed metal inside containers not over 1 gal. cap., not over 250 lb. gr. wt. Metal drums (ICC-37A, 37B) STC, not over 8 gal. cap. Not more than 4 drums in one strong outside wooden box. Fiberboard box (ICC-12B) WIMC, not over 90 lb. gr. wt.
Lithium amide, powdered.	Gray, finely-divided powder having an odor resembling ammonia. Develops heat in contact with moisture. Do not stow with explosives, inflammable liquids (red label), or acids (white label). Keep cool and dry.	Yellow	Stowage: "On deck under cover." "On deck protected." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-11B) WIC, not over 600 lb. net wt. Wooden boxes, (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drum (ICC-21C) WIMC, ICC-2F not over 250 lb. gr. wt. Plywood drums (ICC-22B) WIMC, not over 220 lb. gr. wt.

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted	Not permitted	Not permitted.
Not permitted	Ferry stowage (AA). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-11B) WIC, not over 600 lb. net wt. Wooden boxes, (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drum (ICC-21C) WIMC, ICC-2F not over 250 lb. gr. wt. Plywood drums (ICC-22B) WIMC, not over 220 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs (ICC-11B) WIC, not over 600 lb. net wt. Wooden boxes, (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiber drum (ICC-21C) WIMC, ICC-2F not over 250 lb. gr. wt. Plywood drums (ICC-22B) WIMC, not over 220 lb. gr. wt.



Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Lithium hydride.....	<i>Odorless, gray lumps or powder. Combustible, burns quietly. Evolves gas when in contact with moisture. The gas forms inflammable mixture with air, over a wide range. Do not stow with explosives, inflammable liquids (red label), or acids (white label). Keep cool and dry.</i>	Yellow.....	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-5, 6B, 6C) not over 110 gal. cap. (ICC-17C) STC, not over 55 gal. cap. Fiberboard box (ICC-12B) WIMC, not over 90 lb. gr. wt. Metal drums (ICC-37A, 37B) STC, not over 6 gal. cap. Not more than 4 drums in one strong outside wooden box. Wooden boxes (ICC-15A, 15B) with hermetically sealed metal inside containers, not over 250 lb. gr. wt. Lithium metal immersed in neutral oil may be accepted in: Wooden boxes (ICC-15A, 15B) WIMC or (ICC-37A, 37B) STC) not over 30 lb. net wt. Metal drum (ICC-17H) STC not over 55 gal. cap. authorized for lithium metal in the form of cups or ingots only. Lithium metal fused solid in the container may be accepted in: Metal drum (ICC-17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Lithium metal in cartridges not exceeding 18 grams net weight each may be accepted in strong outside containers, not over 1 lb. net wt. of lithium metal. Lithium metal in cartridges containing more than 18 grams, but not more than 120 grams of lithium must be packed in wooden boxes (ICC-15A, 15B) WIMC, not over 75 lb. gr. wt. Authorized for lithium metal only: ICC approved aluminum carrier tubes, WIC not over 50 gm net wt. Lithium metal in ribbon form not over 1/2 in. wide and 1/16 in. thick coated with heavy mineral oil or petrolatum may be accepted in fiberboard boxes (ICC-12B), WIMC, not over 1600 ft. on reels. Authorized for lithium hydride and lithium metal only: Metal drums: (ICC-17H, 37A) STC, WIMC, not over 55 gal. cap. Authorized for lithium ferro silicon only: Fiber drum (ICC-21C) WIMC not over 5 lb. net wt. ea., not over 400 lb. total gr. wt.
Lithium metal.....	<i>Very light, soft metal. Burns with intense white flame. Reacts readily with moisture to evolve an inflammable gas. Do not stow with explosives, combustible materials, or acids (white label). Keep cool and dry.</i>	Yellow.	
Lithium silicon.....	<i>Black, shiny lumps, or powder with sharp irritating odor. Reacts readily with water to evolve an inflammable gas. Under certain conditions enough heat is generated to ignite the gas mixture in air. Do not stow with explosives, combustible materials, or acids (white label). Keep cool and dry.</i>	Yellow.	
Lithium ferro silicon.....	<i>Dark crystalline brittle metallic lumps or powder. Evolves an inflammable gas when in contact with moisture. Do not stow with explosives, combustible materials or acids (white label). Keep cool and dry.</i>	Yellow.	

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.....	Not permitted.....	Not permitted.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Lithium peroxide.....	Light practically odorless, straw-colored powder. Reacts readily with water to form the hydrate. Mixed with combustible organic materials it may be ignited by mild friction. Do not stow with explosives, combustible materials, or acids (white label). Keep cool and dry.	Yellow.....	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.
Magnesium dress.....	Must not be shipped when hot or when containing moisture liable to cause heating or fire during transportation. Stow in dry, well-ventilated space.	No label required.	No other restrictions.....

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.	Ferry stowage (AA)..... Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. and not exceeding 880 lb. gr. wt. (ICC-6B, 6C) not over 110 gal. cap. and not exceeding 1760 lb. gr. wt. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. and not exceeding 600 lb. net wt. (ICC-11A, 11B) WIC, not over 50 gal. cap. and not exceeding 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.
No other restrictions.....	No other restrictions.....	No other restrictions.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Magnesium, metallic (other than scrap), powdered, turnings, or ribbon.	<i>A white metal (other than scrap) which may be in the form of powder, pellets, turnings, or ribbons. In finely divided form is easily ignited and burns with intense heat and light. Do not stow with inflammable liquids (red label) or acids (white label). Keep dry.</i>	Yellow.....	<p>Stowage: "On deck protected." "Tween decks readily accessible."</p> <p>Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) WIC or WIML ICC-2F not over 600 lb. net wt. Wooden boxes: (ICC-15A, 15B) WIL (ICC-2F or 2M) not over 250 lb. gr. wt. (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12A) WIC glass not over 5 lb. cap. ea. not over 20 lb. net wt. (ICC-12B) WIC not over 65 lb. gr. wt. (ICC-12B) WIC plastic not over 25 lb. net wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>
Magnesium peroxide, solid	<i>White, powdery substance. Decomposes on heating. Insoluble in water: gradually decomposed by it with liberation of oxygen. Stow separate from all combustible materials, explosives, or acids (white label). Keep cool and dry.</i>	Yellow.....	<p>Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible."</p> <p>Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 600 lb. net wt. (ICC-11A, 11B) WIC, not over 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.....	Not permitted.....	Not permitted.....
<p>Stowage: "On deck under cover." "Tween decks readily accessible."</p> <p>Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>	<p>Ferry stowage (AA).....</p> <p>Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>	<p>Ferry stowage (HB).</p> <p>Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C) not over 110 gal. cap. (ICC-17C, 17E, 17H, 37A, 37B) STC, not over 55 gal. cap. Wooden barrels or kegs: (ICC-10A, 10B, 10C) not over 50 gal. cap. (ICC-11A, 11B) WIC, not over 600 lb. net wt. Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12A, 12B) WIC, not over 65 lb. gr. wt. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Plywood drums: (ICC-22A) not over 220 lb. gr. wt. (ICC-22B) WIMC, not over 220 lb. gr. wt.</p>

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Magnesium scrap ( <i>borings, clippings, shavings, sheets, turnings or scalplings</i> ).	<i>Shavings, borings, turnings or other small pieces of metallic magnesium other than powder.</i> Do not stow with inflammable liquids (red label) or acids (white label). Keep dry.	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Tightly and securely closed metal barrels, wooden barrels, or metal pails. Magnesium scrap consisting of clippings, scalplings, or sheets: Tightly closed boxcars. Tightly closed gondola cars. NOTE: Magnesium scrap consisting of clippings, scalplings, or sheets in tightly and securely closed metal drums, wooden barrels, or wooden boxes is exempt from specification packaging, marking other than name of contents, and label requirements.
Matches, strike-anywhere. Matches, block.	<i>Strike-anywhere and block matches are those for the ignition of which a prepared surface is not required.</i>	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A) WIC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B, 12C) WIC, not over 60 lb. gr. wt. NOTE: The vessel operator shall not accept shipments of strike-anywhere matches unless the outside container shows, in English, the name of the importer, distributor, or manufacturer and the brand or trade mark under which such matches are manufactured and distributed to the trade; and in addition and separate therefrom shall have plainly marked thereon the words "Strike-anywhere matches."
(The originating bill of lading or other shipping paper shall bear the shipper's certifying statement that these matches have been packed in accordance with the conditions set forth in the current ICO regulations.)	Stow well away from living quarters and foodstuffs. Do not stow in same compartment with explosives, inflammable liquids (red label), inflammable solids or oxidizing materials (yellow label).		
Matches, book. Matches, card.	<i>Matches intended to be ignited on a prepared surface only and which may be stitched in or fastened to a cover or folder, or prepared match strips not so attached or covered.</i> Each outside container will be marked "Book matches" or "Card matches" as the case may be.	No label required.	Matches, strike-on-box, book and card, in outside fiberboard or wooden boxes, or matches strike-on-box, book and card when packed with noninflammable articles provided they are included in a tightly closed cardboard or fiberboard container, or are securely wrapped and packed so as to prevent accidental ignition before being placed in the outside containers, are exempt from specification packaging, marking other than name of contents, and labeling requirements.
Matches, strike-on-box	<i>Strike-on-box matches are those matches intended to be ignited on a prepared surface.</i> Each outside container will be marked "Strike-on-box matches".	No label required.	Book matches or strike-on-box matches in a quantity not exceeding 25 books or boxes of not over 35 matches each, packaged as required by the Postal Regulations, are also exempt from the marking requirements.

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.	Not permitted.	Not permitted.
Stowage: "On deck under cover." Outside containers: Wooden boxes (ICC-15A) WIC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B, 12C) WIC, not over 60 lb. gr. wt. NOTE: The vessel operator shall not accept shipments of strike-anywhere matches unless the outside container shows, in English, the name of the importer, distributor, or manufacturer and the brand or trade mark under which such matches are manufactured and distributed to the trade; and in addition and separate therefrom shall have plainly marked thereon the words "Strike-anywhere matches."	Ferry stowage (AA). Outside containers: Wooden boxes (ICC-15A) WIC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B, 12C) WIC, not over 60 lb. gr. wt. NOTE: The vessel operator shall not accept shipments of strike-anywhere matches unless the outside container shows, in English, the name of the importer, distributor, or manufacturer and the brand or trade mark under which such matches are manufactured and distributed to the trade; and in addition and separate therefrom shall have plainly marked thereon the words "Strike-anywhere matches."	Ferry stowage (BB). Outside containers: Wooden boxes (ICC-15A) WIC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B, 12C) WIC, not over 60 lb. gr. wt. NOTE: The vessel operator shall not accept shipments of strike-anywhere matches unless the outside container shows, in English, the name of the importer, distributor, or manufacturer and the brand or trade mark under which such matches are manufactured and distributed to the trade; and in addition and separate therefrom shall have plainly marked thereon the words "Strike-anywhere matches."
Matches, strike-on-box, book and card, in outside fiberboard or wooden boxes, or matches strike-on-box, book and card when packed with noninflammable articles provided they are included in a tightly closed cardboard or fiberboard container, or are securely wrapped and packed so as to prevent accidental ignition before being placed in the outside containers, are exempt from specification packaging, marking other than name of contents, and labeling requirements. Book matches or strike-on-box matches in a quantity not exceeding 25 books or boxes of not over 35 matches each, packaged as required by the Postal Regulations, are also exempt from the marking requirements.	Matches, strike-on-box, book and card, in outside fiberboard or wooden boxes, or matches strike-on-box, book and card when packed with noninflammable articles provided they are included in a tightly closed cardboard or fiberboard container, or are securely wrapped and packed so as to prevent accidental ignition before being placed in the outside containers, are exempt from specification packaging, marking other than name of contents, and labeling requirements. Book matches or strike-on-box matches in a quantity not exceeding 25 books or boxes of not over 35 matches each, packaged as required by the Postal Regulations, are also exempt from the marking requirements.	Matches, strike-on-box, book and card, in outside fiberboard or wooden boxes, or matches strike-on-box, book and card when packed with noninflammable articles provided they are included in a tightly closed cardboard or fiberboard container, or are securely wrapped and packed so as to prevent accidental ignition before being placed in the outside containers, are exempt from specification packaging, marking other than name of contents, and labeling requirements. Book matches or strike-on-box matches in a quantity not exceeding 25 books or boxes of not over 35 matches each, packaged as required by the Postal Regulations, are also exempt from the marking requirements.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Motion-picture film (nitrocellulose base) including mixed shipments with noninflammable film. Motion-picture film (processed, positive or negative, nitrocellulose base). X-ray film (nitrocellulose base). Each reel shall be in a tightly closed metal can.	<b>Highly inflammable.</b> Decomposition may start and ignition occurs at relatively low temperatures. If inhaled, the products of decomposition are irritating and poisonous even in low concentrations. Provide cool stowage as in a compartment having a temperature of not exceeding 100° F. and well away from any source of heat, or in position to protect or move, even to jettisoning in event of fire. Do not stow in same compartment with explosives, inflammable liquids (red label), inflammable solids or oxidizing materials (yellow label) or acids (white label). Characteristics and hazards as for "motion-picture film." See above.	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Metal cases (ICC-32A, 32B), not over 12,000 ft. of 1½ in. film, or 6,000 ft. of 2¼ in. film. Trunks (ICC-32C) WIC, for motion-picture film and projecting apparatus. Wooden boxes (ICC-15A, 15B, 15C) WIC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 2,000 ft. of film in each film reel can, not over 65 lb. gr. wt.
Motion-picture film unexposed (nitrocellulose base). X-ray film, unexposed (nitrocellulose base). Each reel shall be in a tightly closed can or box.	Characteristics and hazards as for "motion-picture film." See above.	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 75 lb. gr. wt.
Motion-picture film, old and worn out (nitrocellulose base).	Old and worn out (not scrap) film, no longer exhibitible and with value only for reclamation of material. Characteristics and hazards are the same as for "Motion-picture film (nitrocellulose base)." See above.	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums: (ICC-6A) not over 55 gal. cap. (ICC-6B, 6C, 6J) not over 110 gal. cap. (ICC-37A, 37B) STC, not over 55 gal. cap. Fiber drums (ICC-21C) not over 250 lb. gr. wt. Metal boxes (ICC-32A, 32B) not exceeding core cap. Metal boxes (ICC-32D) not over 250 lbs. net wt. of film. Wooden boxes (ICC-15A) WIML, not over 450 lb. gr. wt. (ICC-15A, 15B, 15C, 16A, 19A) WIMC, not over 450 lb. gr. wt.
Motion-picture film, toy (nitrocellulose base).	Film 1½ inches wide on metal reel; not over 200 feet of film on each reel. Each reel shall be in a tightly closed metal can. Characteristics and hazards as for "Motion-picture film (nitrocellulose base)."	Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." "Under deck away from heat." Outside containers: Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 250 lb. gr. wt.

Solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck under cover." "Tween decks readily accessible." Outside containers: Metal cases (ICC-32A, 32B), not over 12,000 ft. of 1½ in. film, or 6,000 ft. of 2¼ in. film. Trunks (ICC-32C) WIC, for motion-picture film and projecting apparatus. Wooden boxes (ICC-15A, 15B, 15C) WIC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 2,000 ft. of film in each film reel can, not over 65 lb. gr. wt.	Ferry stowage (AA). Outside containers: Metal cases (ICC-32A, 32B), not over 12,000 ft. of 1½ in. film, or 6,000 ft. of 2¼ in. film. Trunks (ICC-32C) WIC, for motion-picture film and projecting apparatus. Wooden boxes (ICC-15A, 15B, 15C) WIC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 2,000 ft. of film in each film reel can, not over 65 lb. gr. wt.	Ferry stowage (BB). Outside containers: Metal cases (ICC-32A, 32B), not over 12,000 ft. of 1½ in. film, or 6,000 ft. of 2¼ in. film. Trunks (ICC-32C) WIC, for motion-picture film and projecting apparatus. Wooden boxes (ICC-15A, 15B, 15C) WIC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 2,000 ft. of film in each film reel can, not over 65 lb. gr. wt.
Stowage: "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 75 lb. gr. wt.	Ferry stowage (AA). Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 75 lb. gr. wt.	Ferry stowage (BB). Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 75 lb. gr. wt.
Not permitted.	Not permitted.	Not permitted.
Stowage: "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 250 lb. gr. wt.	Ferry stowage (AA). Outside containers: Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 250 lb. gr. wt.	Ferry stowage (BB). Outside containers: Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 250 lb. gr. wt.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Motion-picture film, toy pieces (nitrocellulose base).	Pieces of exposed toy motion-picture film approximately 3/4 inch by 1 1/4 inches in size. Not to exceed 1,000 such pieces enclosed in a tight metal box.	No label required.	No restrictions.
Motion-picture outfits, toy.	Motion-picture outfits, toy, consisting of one projecting apparatus and not to exceed one roll of motion-picture film, 18 feet or less in length. Film shall be in a tight metal box, this enclosed in a wooden box and packed with the projection apparatus in an outside container. Outside containers shall be marked with descriptive name of contents.	No label required.	No restrictions.
Motion-picture film, (processed, positive or negative, slow-burning.)	Exposed or unexposed cellulose acetate base film.	No label required.	There are no stowage or container restrictions on packages containing only cellulose acetate base (slow-burning) motion-picture and X-ray film; however, when such film is packed with nitrocellulose base film (inflammable) all requirements must be complied with as if all film were inflammable.
Motion-picture film, unexposed (slow-burning).	Old and worn out (including scrap) film, no longer exhibit-able and with value only for reclamation of material.	Yellow.	Stowage: "On deck protected." "On deck under cover." Outside containers: Steel barrels or drums: (ICC-5A, 6J) not over 880 lb. gr. wt. (ICC-5B, 6C) not over 1700 lb. gr. wt. (ICC-17H, 37A, 37B) STC, not over 880 lb. gr. wt. Wooden barrels or kegs (ICC-11B) WIL, not over 375 lb. gr. wt. Wooden boxes (ICC-15A, 15B) WIL, not over 450 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC not over 65 lb. gr. wt. Fiber drums (ICC-21A, 21B) not over 220 lb. gr. wt.
Motion-picture film, old and worn out (slow-burning).	Consists of the scrap obtained from motion-picture film, X-ray film and photographic film.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
Motion-picture film scrap (nitrocellulose base).	Being finely divided, it is more hazardous than the original materials.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
Photographic film scrap (nitrocellulose base).	Stow well away from all sources of heat. Protect from temperatures exceeding 100° F.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
X-ray film scrap (nitrocellulose base).	Outside containers shall be marked with descriptive name of contents.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
Motion-picture film, scrap (slow-burning).	Finely divided nickel suspended in a liquid.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
Photographic film, scrap (slow-burning).	When dry, subject to spontaneous heating and ignition.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
X-ray film (slow-burning).	Check containers to ascertain if leakage has occurred.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
X-ray film, scrap (slow-burning).	Reject leaking containers or those showing signs of having leaked.	Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.
Nickel catalyst, finely divided, activated or spent (wet with not less than 40% by weight of water or other suitable liquid).		Yellow.	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.

Liquids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
No restrictions.	No restrictions.	No restrictions.
There are no stowage or container restrictions on packages containing only cellulose acetate base (slow-burning) motion-picture and X-ray film; however, when such film is packed with nitrocellulose base film (inflammable) all requirements must be complied with as if all film were inflammable.	There are no stowage or container restrictions on packages containing only cellulose acetate base (slow-burning) motion-picture and X-ray film; however, when such film is packed with nitrocellulose base film (inflammable) all requirements must be complied with as if all film were inflammable.	There are no stowage or container restrictions on packages containing only cellulose acetate base (slow-burning) motion-picture and X-ray film; however, when such film is packed with nitrocellulose base film (inflammable) all requirements must be complied with as if all film were inflammable.
Not permitted.	Not permitted.	Not permitted.
Stowage: "On deck protected." "On deck under cover." Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.	Stowage: Ferry stowage (AA). Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.	Stowage: Ferry stowage (BB). Outside containers: Steel barrels or drums (ICC-5, 6A, 6B, 6C) not over 55 gal. cap. (ICC-17H, 37A, 37B) STC, not over 55 gal. cap. Wooden boxes (ICC-15A, 15B) WIMC, not over 100 lb. gr. wt. Fiberboard boxes (ICC-12B) WIMC, not over 65 lb. gr. wt.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Nitrates.....  Ammonium nitrate (organic coated). For permit requirements see § 146.22-30.	All outside containers of nitrates shall be marked with the appropriate descriptive name of the nitrate packed within the container. <i>Colorless, odorless, hygroscopic crystals or white granules. Contains 5-4 percent of inert clay-like material and up to 1 percent of a wax-like coating to provide a surface coating of particles to reduce caking and to prevent stickiness.</i> <i>Under conditions of exposure to temperatures above 400° F., rapid decomposition and ignition may occur. If the gaseous products of reaction cannot escape freely, pressure and temperature will rise, and explosive decomposition may occur. The rate of reaction of this material may become explosive at very low gas pressures.</i> Do not accept for shipment if the temperature of the bagged material exceeds 130° F. Bulk shipment not permitted. Bagged material shall be accepted for single cargo shipment only. When shipped in barrels: Do not stow in the same hold, nor in any hold above or below one in which explosives are stowed except as provided in § 146.22-15(b). The engine and boiler spaces or one complete hold shall intervene between stowages on a horizontal plane. Do not stow in the same hold, nor in any hold above, below or adjacent to one in which inflammable gases (red gas label), inflammable liquids (red label), combustible liquids, or corrosive liquids (white label) are stowed. Stow well away from steam pipes, electrical circuits, or other sources of heat. Do not stow in the same hold with cotton, charcoal or other inflammable solids or oxidizing materials, nor with combustible materials or finely divided substances or powders. Do not stow in the same hold nor in any hold above, below or adjacent to one in which sulfur in bulk is stowed. Use minimum of combustible dunnage. (See § 146.22-30 (f).) Remove trash, scrap, and spilled material promptly. Bags must be stowed so as to provide maximum ventilation and access for water in the event of fire. (See § 146.22-30 (f).) Hose lines must be connected, laid out, and tested before loading or unloading operations commence.	Yellow.....	Stowage: "On deck protected." "On deck under cover." "Tween decks." "Under deck away from heat." Outside containers: For single cargo shipments only: Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap. Metal barrels or drums. NOTE: It is not required that the above containers be ICC specification containers, although ICC specification containers are acceptable, but the officer in charge of loading the vessels shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any container showing damage, leakage or inability to properly contain the substance.

Solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.....	Ferry stowage (AA). Outside containers: Metal barrels or drums.	Ferry stowage (BB). Outside containers: Metal barrels or drums.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<b>Nitrates—Continued</b> Ammonium nitrate—Con.	Smoking, except in designated areas, the use of open lights, welding or burning, or other ignition sources in the hold, on deck or on the dock immediately adjoining ammonium nitrate material shall be strictly prohibited. A fire watch shall be provided by the master and stationed in the hold from which the material is being loaded or unloaded. The master or person in charge of loading or unloading the vessel shall ensure that the operation is supervised at all times and that all precautions are observed. Containers shall be marked "Ammonium Nitrate. (Organic Coated)." In Event of Fire in This Cargo: Flood with large volume of water. Do not use steam or other methods of smothering. Provide maximum ventilation by removing hatch covers, and opening all access openings.		
Ammonium nitrate (no organic coating). Ammonium nitrate and ammonium nitrate products containing 90% or more ammonium nitrate by weight (no organic coating). Fertilizer grade. Dynamite grade. Nitrous oxide grade. Technical grade. For permit requirements see § 146.22-30(c).	May be prills, crystals, grains or flakes. Contains 90% or more by weight of ammonium nitrate and a small quantity of impurity or additive and no organic material. Soluble in water. Under conditions of exposure to temperatures above 400° F., rapid decomposition and ignition may occur. If the gaseous products of reaction cannot escape freely, pressure and temperature will rise, and explosive decomposition may occur. Do not accept for shipment if the temperature of the bagged material exceeds 130° F. Do not stow in the same hold, nor in any hold above or below one in which explosives are stowed except as provided in § 146.22-15(b). The engine and boiler spaces or one complete hold shall intervene between stowages on a horizontal plane. Do not stow in the same hold, nor in any hold above, below or adjacent to one in which inflammable compressed gases (red gas label), inflammable liquids (red label), combustible liquids, or corrosive liquids (white label) are stowed. Stow well away from steam pipes, electrical circuits, or other sources of heat. Do not stow in the same hold with cotton, charcoal, or other inflammable solids or oxidizing materials, nor with combustible materials or finely divided substances or powders.	Yellow-----	Stowage: "On deck protected" "On deck under cover." "Tween decks." "Under deck." Outside containers: Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap. Wooden barrels or kegs. Fiber drums. Metal barrels or drums (see § 146.22-30 (c) (2)). NOTE: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the officer in charge of loading the vessel shall satisfy himself they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage, or inability to properly contain the substance.

Solids and oxidizing materials—Continued

Required condition for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted-----	Ferry stowage (A A)----- Outside containers: Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of a strength not less than bags made of 7½ oz. burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap. Wooden barrels or kegs. Fiber drums. Metal barrels or drums.	Ferry stowage (B B). Outside containers: Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of a strength not less than bags made of 7½ oz. burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap. Wooden barrels or kegs. Fiber drums. Metal barrels or drums.



Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Nitrates—Continued Ammonium nitrate—Continued	Do not stow in the same hold nor in any hold above, below or adjacent to one in which sulfur in bulk is stowed. Use minimum of combustible dunnage. (See § 146.22-30 (f).) Remove trash, scrap, and spilled material promptly. Bags must be stowed so as to provide maximum ventilation and access for water in the event of fire. (See § 146.22-30 (f).) Hose lines must be connected, laid out and tested before loading or unloading operations commence. Smoking, except in designated areas, the use of open lights, welding or burning, or other ignition sources in the hold, on deck, or on the dock immediately adjoining ammonium nitrate material shall be strictly prohibited. A fire watch shall be provided by the master and stationed in the hold from which the material is being loaded or unloaded. The master or person in charge of loading or unloading the vessel shall ensure that the operation is supervised at all times and that all precautions are observed. Containers shall be marked "Ammonium Nitrate". In Event of Fire in the Cargo: Flood with large volume of water. Do not use steam or other methods of smothering. Provide maximum ventilation by removing hatch covers, and opening all access openings to the hold. The mixtures consist of approximately 80% by weight of ammonium nitrate and 40% of phosphate salts, mainly dicalcium phosphate. Other ammonium nitrate phosphate formulations, which when tested show hazards similar to those demonstrated by the ammonium nitrate phosphate mixtures, are also included in this group. Under conditions of exposure to temperatures above 400° F., rapid decomposition and ignition may occur. If the gaseous products of reaction cannot escape freely, pressure and temperature will rise, and explosive decomposition may occur. Do not accept for shipment if the temperature of the bagged material exceeds 130° F. Do not stow in the same hold, nor in any hold above or below one in which explosives are stowed except as provided in § 146.22-15(b). The engine and boiler spaces or one complete hold shall intervene between stowages on a horizontal plane.		
Ammonium nitrate phosphate (No organic coating). For permit requirements see § 146.22-30.		Yellow	Stowage: "On deck protected." "On deck under cover." "Tween decks." "Under deck." Outside containers: Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap. Wooden barrels or kegs. Fiber drums. Metal barrels or drums (see § 146.22-30 (c) (2)).  NOTE: It is not required that the above containers be ICC specification containers, although ICC specification containers are acceptable, but the officer in charge of loading the vessel shall satisfy himself they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage, or inability to properly contain the substance.

Solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted.	Ferry stowage (A.A.) Outside containers: Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap. Wooden barrels or kegs. Fiber drums. Metal barrels or drums.	Ferry stowage (B.B.) Outside containers: Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap. Wooden barrels or kegs. Fiber drums. Metal barrels or drums.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Nitrates—Continued Ammonium nitrate phosphate—Continued	<p>Do not stow in the same hold, nor in any hold above, below or adjacent to one in which inflammable compressed gases (red gas label), inflammable liquids (red label), combustible liquids, or corrosive liquids (white label) are stowed.</p> <p>Stow well away from steam pipes, electrical circuits, or other sources of heat.</p> <p>Do not stow in the same hold with cotton, charcoal or other inflammable solids or oxidizing materials, nor with combustible materials or finely divided substances or powders.</p> <p>Do not stow in the same hold nor in any hold above, below or adjacent to one in which sulfur in bulk is stowed.</p> <p>Use minimum of combustible dunnage. (See § 146.22-30 (f).)</p> <p>Remove trash, scrap, and spilled material promptly.</p> <p>Bags must be stowed so as to provide maximum ventilation and access for water in the event of fire. (See § 146.22-30 (f).)</p> <p>Hose lines must be connected, laid out and tested before loading or unloading operations commence.</p> <p>Smoking, except in designated areas, the use of open lights, welding or burning, or other ignition sources in the hold, on deck, or on the dock immediately adjoining ammonium nitrate material shall be strictly prohibited.</p> <p>A fire watch shall be provided by the master and stationed in the hold from which the material is being loaded or unloaded.</p> <p>The master or person in charge of loading or unloading the vessel shall ensure that the operation is supervised at all times and that all precautions are observed.</p> <p>Containers shall be marked "Ammonium Nitrate Phosphate."</p> <p>In Event of Fire in the Cargo: Flood with large volume of water.</p> <p>Do not use steam or other methods of smothering.</p> <p>Provide maximum ventilation by removing hatch covers, and opening all access openings to the hold.</p>		

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<b>Nitrates—Continued</b> Ammonium nitrate—Carbonate mixtures. No permit required, see § 146.22-30 (d).	<p>The mixtures are composed of approximately 60 percent by weight of ammonium nitrate and 40 percent of fine carbonate (precipitated calcium carbonate, chalk, ground limestone, or ground dolomite). These should be blended together by wet methods so that the proportions of the component materials are uniform throughout the mass.</p> <p>Contains approximately 20.5 percent by weight of nitrogen. Do not accept for shipment if the temperature of the material exceeds 130° F.</p> <p>Do not stow in the same hold, nor in any hold above or below one in which explosives are stowed except as provided in § 146.22-15(b). The engine and boiler spaces or one complete hold shall intervene between stowages on a horizontal plane.</p> <p>Do not stow in the same hold, nor in any hold above, below, or adjacent to one in which inflammable compressed gases (red gas label), inflammable liquids (red label), combustible liquids, or corrosive liquids (white label) are stowed.</p> <p>Stow well away from steam pipes, electrical circuits, or other sources of heat.</p> <p>Do not use explosives to break up caked material.</p> <p>Use minimum of combustible dunnage. (See (146.22-30 (f)).</p> <p>Remove trash, scrap, and spilled material promptly.</p> <p>Bags must be stowed so as to provide maximum ventilation and access for water in the event of fire. (See 146.22-30 (f)).</p> <p>Containers shall be marked "Ammonium nitrate—Carbonate mixtures".</p> <p>In Event of Fire in This Cargo:</p> <p>Flood with large volume of water.</p> <p>Do not use steam or other methods of smothering.</p> <p>Provide maximum ventilation by removing hatch covers, and opening all access openings to the hold.</p>	Yellow-----	<p>Stowage:</p> <p>"On deck protected."</p> <p>"On deck under cover."</p> <p>"Tween decks."</p> <p>"Under deck."</p> <p>Outside containers:</p> <p>Metal barrels or drums.</p> <p>Wooden barrels or kegs.</p> <p>Fiber drums.</p> <p>Bulk.</p> <p>Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags made of 7½ ounce burlap.</p> <p>Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap.</p> <p>NOTE 1: Ammonium nitrate-carbonate mixtures packaged in metal barrels or drums, wooden barrels or kegs, or fiber drums are exempt from the labeling requirement.</p> <p>NOTE 2: It is not required that the above containers be ICC specification containers, although ICC specification containers are acceptable, but the officer in charge of loading the vessel shall satisfy himself they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>

Solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted-----	<p>Ferry stowage (AA)-----</p> <p>Outside containers:</p> <p>Metal barrels or drums.</p> <p>Wooden barrels or kegs.</p> <p>Fiber drums.</p> <p>Bulk.</p> <p>Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags of 7½ ounce burlap.</p> <p>Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap.</p>	<p>Ferry stowage (BB).</p> <p>Outside containers:</p> <p>Metal barrels or drums.</p> <p>Wooden barrels or kegs.</p> <p>Fiber drums.</p> <p>Bulk.</p> <p>Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags of 7½ ounce burlap.</p> <p>Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap.</p>

Table E—Classification: Inflammable solids

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<p><b>Nitrates—Continued</b> Ammonium nitrate mixed fertilizer (containing over 13% but less than 60% by weight of ammonium nitrate). No permit required, see § 146.22-30 (d). Ammonium nitrate mixed fertilizer meeting the following conditions are not subject to regulation:</p> <ol style="list-style-type: none"> <li>1. The ammonium nitrate content is not over 13 percent by weight.</li> <li>2. The mixture is non-acidic.</li> <li>3. No other oxidizing material is contained in the mixture.</li> <li>4. Less than 5 percent of organic or combustible is contained in the mixture.</li> </ol> <p><b>NOTE:</b> Mixed fertilizers which fail to meet the above conditions but after testing in accordance with section 146.22-30 (e) do not qualify as an inflammable solid, oxidizing material or a hazardous article are not subject to regulation.</p>	<p>Mixed fertilizers not specified by name in this section. Includes ammonium nitrate phosphate and ammonium nitrate phosphate fertilizers containing less than 60% ammonium nitrate with no organic fillers.</p> <p><i>Mixture of ammonium nitrate, and often other nitrogen compounds, with either or both phosphate and potash compounds.</i></p> <p><i>Mixture must be treated to make whole mass nonacidic in nature.</i></p> <p><i>Acidic mixtures attack fabric or paper containers, and tend to heat spontaneously.</i></p> <p><i>Must contain less than 8% of organic or combustible material.</i></p> <p>Containers shall be marked with the percent by weight of ammonium nitrate contained in the mixture.</p> <p>Do not accept for shipment if the temperature of the material exceeds 130° F.</p> <p>Do not stow in the same hold, nor in any hold above or below one in which explosives are stowed except as provided in § 146.22-15(b). The engine and boiler spaces or one complete hold shall intervene between stowages on a horizontal plane.</p> <p>Do not stow in the same hold, nor in any hold above, below, or adjacent to one in which inflammable compressed gases (red gas label), inflammable liquids (red label), combustible liquids, or corrosive liquids (white label) are stowed.</p> <p>Stow well away from steam pipes, electrical circuits, or other sources of heat.</p> <p>Use minimum of combustible dunnage. (See § 146.22-30 (f).)</p> <p>Remove trash, scrap, and spilled material promptly.</p> <p>Bags must be stowed so as to provide maximum ventilation and access for water in the event of fire. (See § 146.22-30 (f).)</p> <p>Containers shall be marked "Ammonium nitrate mixed fertilizer."</p> <p>In Event of Fire in This Cargo:</p> <p>Flood with large volume of water.</p> <p>Do not use steam or other methods of smothering.</p> <p>Provide maximum ventilation by removing hatch covers, and opening all access openings to the hold.</p>	Yellow	<p><b>Stowage:</b> "On deck protected." "On deck under cover." "Tween decks." "Under deck."</p> <p><b>Outside containers:</b> Metal barrels or drums. Wooden barrels or kegs. Fiber drums. Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap.</p> <p><b>NOTE 1:</b> Ammonium nitrate mixed fertilizers containing over 13 percent by weight of ammonium nitrate packaged in metal barrels or drums, wooden barrels or kegs or fiber drums are exempt from the labeling requirement.</p> <p><b>NOTE 2:</b> It is not required that the above containers be ICC specification containers, although ICC specification containers are acceptable, but the officer in charge of loading the vessel shall satisfy himself they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage, or inability to properly contain the substance.</p>

and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Not permitted	<p>Ferry stowage (AA). Outside containers: Metal barrels or drums. Wooden barrels or kegs. Fiber drums. Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap.</p>	<p>Ferry stowage (BB). Outside containers: Metal barrels or drums. Wooden barrels or kegs. Fiber drums. Multi-ply paper bags, not over 200 lb. net wt., moisture proof, made tight against sifting and of a strength not less than bags made of 7½ ounce burlap. Burlap bags, not over 200 lb. net wt., moisture proof, made tight against sifting, and of not less than 7½ ounce burlap.</p>

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<b>Nitrates</b> Aluminum nitrate.....	<i>Colorless crystals or salts. Soluble in water. Involved in a fire will greatly intensify the burning of all combustible materials.</i> Stow separate from all combustible materials explosives and acids (white label).	Yellow.....	<p>Stowage:            "On deck protected."            "On deck under cover."            "Tween decks."            "Under deck."</p> <p>Outside containers:            Strong metal cans.            Metal or fiber drums.            Barrels or kegs.            Wooden or fiberboard boxes, WIC.</p> <p>NOTE 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p> <p>NOTE 2: Aluminum nitrate, Barium nitrate, Calcium nitrate, Guanidine nitrate, Nitrate of soda and potash, Potassium nitrate, Sodium nitrate, and Strontium nitrate may in addition be packed as follows:            Bulk.            Bulk in sift-proof, closed R.R. freight cars or highway vehicles.            Burlap bags, not over 200 lb. net wt., moisture-proof, made tight against sifting and of not less than 7½ oz. burlap.            Multi-wall paper bags, not over 110 lb. net wt., at least 4 ply construction, moisture-proof and made tight against sifting.</p>

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
<p>Stowage:            "On deck protected."            "On deck under cover."            "Tween decks."            "Under deck."</p> <p>Outside containers:            Strong metal cans.            Metal or fiber drums.            Barrels or kegs.            Wooden or fiberboard boxes, WIC.</p> <p>NOTE 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>	<p>Ferry stowage (AA).            Outside containers:            Strong metal cans            Metal or fiber drums            Barrels or kegs.            Wooden or fiberboard boxes, WIC.</p> <p>NOTE: 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>	<p>Ferry stowage (BB).            Outside containers:            Strong metal cans            Metal or fiber drums.            Barrels or kegs.            Wooden or fiberboard boxes, WIC.</p> <p>NOTE 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<b>Nitrates—Continued</b>			
Barium nitrate.....	Colorless, odorless crystals or white crystalline powder. Soluble in water. Poisonous if taken internally. Stow away from foodstuffs. Stow separate from all combustible materials, explosives or acids (white label).	Yellow.	
Calcium nitrate.....	A white, deliquescent mass. Involved in a fire will greatly intensify the burning of all combustible materials. Soluble in water. Stow separate from all combustible materials, explosives or acids (white label).	No label required.	
Guanidine nitrate.....	Colorless crystals or fine granular powder. Moderately soluble in water. Stow separate from all combustible materials, explosives or acids (white label).	Yellow.	
Lead nitrate.....	A heavy, white crystalline salt. Will support combustion of organic matter. Poisonous. Soluble in water. Stow separate from all combustible materials, explosives, acids (white label), or foodstuffs.	Yellow.	
Magnesium nitrate.....	Colorless, clear crystals. Soluble in water. Involved in a fire will greatly intensify the burning of all combustible materials. Stow separate from all combustible materials, explosives or acids (white label).	Yellow.	
Nitrate of soda and potash.....	Mixture of sodium and potassium nitrate. Soluble in water. Involved in a fire will greatly intensify the burning of all combustible materials. Stow separate from all combustible materials, explosives, inflammable liquids, or acids. Nitrates in bulk or in bags should not be stowed in the same compartment with combustible materials, explosives, inflammable liquids (red label), or acids (white label). Carefully clean and remove all residue of nitrate remaining in a compartment used for the stowage of this substance.	No label required.	
Nitrates N. O. S.....	Any nitrate, classifying as an oxidizing material in accordance with these regulations, that is not specified by name herein. Involved in a fire will greatly intensify the burning of all combustible material. Soluble in water. Stow separate from all combustible material, explosives, or acids (white label).	Yellow.	

Solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
Nitro carbo nitrate. For loading and discharging requirements see § 146.22-40.	<p><i>Composed principally of ammonium nitrate. Involved in a fire will greatly intensify the burning of many combustible materials and under conditions of exposure to high temperatures (above 400° F.) rapid decomposition and ignition may occur. Will burn with explosive violence. Soluble in water.</i></p> <p>Do not stow in the same hold or compartment with combustible cargo, explosives (except that nitro carbo nitrate packaged in strong metal cans, metal or fiber drums, barrels, kegs, or wooden or fiberboard boxes with non-combustible inside containers may be stowed in a hold or compartment with dynamite, commercial boosters and/or other non-priming, non-initiating types of explosives which are compatible with dynamite) or acids.</p> <p>Stow away from chlorates.</p> <p>When shipped in bags:</p> <p>Do not stow in the same hold, nor in any hold above, below or adjacent to one in which explosives are stowed except as provided for in § 146.22-15(b).</p> <p>Do not stow in the same hold, nor in any hold above, below or adjacent to one in which inflammable gases (red gas label), inflammable liquids (red label), combustible liquids or corrosive liquids (white label) are stowed.</p> <p>Stow well away from steam pipes, electrical circuits and other sources of heat.</p> <p>Do not stow in the same hold with cotton, charcoal or other inflammable solids or oxidizing materials, nor with combustible materials or finely divided substances or powders.</p> <p>Do not stow in the same hold nor in any hold above, below or adjacent to one in which sulfur in bulk is stowed.</p> <p>Use minimum of combustible dunnage. (See § 146.22-30(f).)</p> <p>Remove trash, scrap and spilled material promptly.</p> <p>Bags must be stowed so as to provide maximum ventilation and access for water in the event of fire. (See § 146.22-30(f).)</p>	Yellow-----	<p>Stowage:</p> <p>"On deck protected."</p> <p>"On deck under cover."</p> <p>"Tween decks."</p> <p>"Under deck."</p> <p>Outside containers:</p> <p>Strong metal cans.</p> <p>Metal or fiber drums.</p> <p>Barrels or kegs.</p> <p>Wooden or fiberboard boxes, WIC.</p> <p>NOTE 1: Nitro carbo nitrate packaged in strong metal cans, metal or fiber drums, barrels or kegs or wooden or fiberboard boxes WIC is exempt from the labeling requirements.</p> <p>Multi-wall paper bags, not over 100 lb. net wt., at least 4 ply construction, moisture-proof and made tight against sifting.</p> <p>Burlap bags, not over 100 lb. net wt., moisture-proof, made tight against sifting, and of not less than 7½ oz. burlap.</p> <p>NOTE 2: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>

and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
<p>Stowage:</p> <p>"On deck protected."</p> <p>"On deck under cover."</p> <p>"Tween decks."</p> <p>"Under deck."</p> <p>Outside containers:</p> <p>Strong metal cans.</p> <p>Metal or fiber drums.</p> <p>Barrels or kegs.</p> <p>Wooden or fiberboard boxes, WIC.</p> <p>NOTE 1: Nitro carbo nitrate packaged in strong metal cans, metal or fiber drums, barrels or kegs or wooden or fiberboard boxes WIC is exempt from the labeling requirements.</p> <p>NOTE 2: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>	<p>Ferry stowage (AA)-----</p> <p>Outside containers:</p> <p>Strong metal cans.</p> <p>Metal or fiber drums.</p> <p>Barrels or kegs.</p> <p>Wooden or fiberboard boxes, WIC.</p> <p>NOTE 1: Nitro carbo nitrate packaged in strong metal cans, metal or fiber drums, barrels or kegs or wooden or fiberboard boxes WIC is exempt from the labeling requirements.</p> <p>Burlap bags, not over 100 lb. net wt., moisture-proof, made tight against sifting, and of not less than 7½ oz. burlap.</p> <p>Multi-wall paper bags, not over 100 lb. net wt., at least 4 ply construction, moisture-proof and made tight against sifting.</p> <p>NOTE 2: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>	<p>Ferry stowage (BB).</p> <p>Outside containers:</p> <p>Strong metal cans.</p> <p>Metal or fiber drums.</p> <p>Barrels or kegs.</p> <p>Wooden or fiberboard boxes, WIC.</p> <p>NOTE 1: Nitro carbo nitrate packaged in strong metal cans, metal or fiber drums, barrels or kegs or wooden or fiberboard boxes WIC is exempt from the labeling requirements.</p> <p>Burlap bags, not over 100 lb. net wt., moisture-proof, made tight against sifting, and of not less than 7½ oz. burlap.</p> <p>Multi-wall paper bags, not over 100 lb. net wt., at least 4 ply construction, moisture-proof and made tight against sifting.</p> <p>NOTE 2: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.</p>

Table E—Classification: Inflammable liquids and oxidizing materials—Continued

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation	Required conditions for transportation—Continued		
			Cargo vessel	Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
<i>Nitrates</i> —Continued Nitrocarbo nitrate.—Con	Stow away from chlorates—Continued. When shipped in bags—Continued. Hose lines must be connected, laid out, and tested before loading or unloading operations commence. Smoking, except in designated areas, the use of open lights, welding or burning, or other ignition sources in the hold, or on deck adjoining nitro carbo nitrate material shall be strictly prohibited. A fire watch shall be provided by the master and stationed in the hold in or from which the material is being loaded or unloaded. The master or person in charge of loading or unloading the vessel shall insure that the operation is supervised at all times and that all precautions are observed. When shipped in boxes: Boxes shall be so stowed as to permit the ready access of water to any fire that might develop. Containers shall be marked "Nitro carbo nitrate." In Event of Fire in This Cargo: Flood with large volume of water. Do not use steam or other methods of smothering. Provide maximum ventilation by removing hatch covers, and opening all access openings.					



Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<i>Nitrates—Continued</i> Potassium nitrate.....	White granular or crystalline powder. Soluble in water. Involved in a fire will greatly intensify the burning of all combustible materials. Stow separate from all combustible materials, explosives, inflammable liquids, or acids. Nitrates in bulk or in bags should not be stowed in the same compartment with combustible materials, explosives, inflammable liquids (red label), or acids (white label). Carefully clean and remove all residue of nitrate remaining in a compartment used for the stowage of this substance.	No label required.	Stowage: "On deck protected." "On deck under cover." "Tween decks." "Under deck." Outside containers: Strong metal cans. Metal or fiber drums. Barrels or kegs. Wooden or fiberboard boxes, WIC. NOTE 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.
Silver nitrate.....	Colorless, transparent, tabular, rhombic crystals, becoming gray or grayish-black upon exposure to light in the presence of organic matter. Odorless, with bitter caustic metallic taste. Soluble in cold water. Caustic to skin. White or yellowish crystalline solids. Soluble in water. Involved in a fire will greatly intensify the burning of all combustible materials. Stow separate from all combustible materials, explosives, inflammable liquids (red label), or acids (white label). Nitrates in bulk or in bags should not be stowed in the same compartment with combustible materials, explosives, inflammable liquids (red label), or acids (white label). Carefully clean and remove all residue of nitrate remaining in a compartment used for the stowage of this substance.	Yellow.	NOTE 2: Aluminum nitrate, Barium nitrate, Calcium nitrate, Guanidine nitrate, Nitrate of soda and potash, Potassium nitrate, Sodium nitrate, and Strontium nitrate may in addition be packed as follows: Bulk. Bulk in sift-proof, closed R.R. freight cars or highway vehicles. Burlap bags, not over 200 lb. net wt., moisture-proof, made tight against sifting and of not less than 7½ oz. burlap. Multi-wall paper bags, not over 110 lb. net wt., at least 4 ply construction, moisture-proof and made tight against sifting.
Sodium nitrate.....	White or yellowish crystalline solids. Soluble in water. Involved in a fire will greatly intensify the burning of all combustible materials. Stow separate from all combustible materials, explosives, inflammable liquids (red label), or acids (white label). Nitrates in bulk or in bags should not be stowed in the same compartment with combustible materials, explosives, inflammable liquids (red label), or acids (white label). Carefully clean and remove all residue of nitrate remaining in a compartment used for the stowage of this substance.	No label required.	
Strontium nitrate.....	White granules or powder. Soluble in water. Involved in a fire will greatly intensify the burning of all combustible materials. Stow separate from all combustible materials, explosives, inflammable liquids (red label), or acids (white label).	No label required.	

solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck protected." "On deck under cover." "Tween decks." "Under deck." Outside containers: Strong metal cans. Metal or fiber drums. Barrels or kegs. Wooden or fiberboard boxes, WIC. NOTE 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.	Ferry stowage (AA)..... Outside containers: Strong metal cans. Metal or fiber drums. Barrels or kegs. Wooden or fiberboard boxes, WIC. NOTE 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.	Ferry stowage (BB). Outside containers: Strong metal cans. Metal or fiber drums. Barrels or kegs. Wooden or fiberboard boxes, WIC. NOTE 1: It is not required that the above containers be ICC specification containers although ICC specification containers are acceptable, but the ship's officer in charge of loading shall satisfy himself that they are sufficient in all respects for the purpose intended. He shall refuse any containers showing damage, leakage or inability to properly contain the substance.

Table E—Classification: Inflammable

Descriptive name of article	Characteristic properties, cautions, markings required	Label required	Required conditions for transportation
			Cargo vessel
<i>Organic peroxides</i> ..... Acetyl benzoyl peroxide, solution (solution must not contain more than 40% by weight of the peroxide in a nonvolatile solvent).	<i>Solution of an organic peroxide in a nonvolatile solvent. Clear, colorless liquid with a sharp odor. Burns very rapidly with accelerating intensity when ignited. Do not stow with combustible materials, explosives or acids.</i>	Yellow.....	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12B) WIC, not over 1 gal. cap. (ICC-12B) WIC polyethylene, not over 5 gal. cap. (ICC-12P) WIC ICC-2U, not over 5 gal. cap. Not permitted.
Acetyl benzoyl peroxide, solid. Acetyl peroxide solution (solution must not contain more than 25% by weight of the peroxide in a nonvolatile solvent).	<i>Solution of 25% acetyl peroxide in dimethyl phthalate. Clear colorless liquid with a strong pungent odor. Burns rapidly when ignited. Sensitive to heat. Do not stow with combustible materials, explosives, or acids. Keep cool.</i>	Yellow.....	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12B) WIC, not over 1 gal. cap. (ICC-12B) WIC polyethylene, not over 5 gal. cap. (ICC-12P) WIC ICC-2U, not over 5 gal. cap. Not permitted.
Acetyl peroxide solid. Benzoyl peroxide, dry.....	<i>Granular form is highly inflammable. Strong supporter of combustion. Insoluble in water. Keep cool and dry. Do not stow with combustible materials, explosives or acids.</i>	Yellow.....	Stowage: "On deck protected." "On deck under cover." Outside containers: Wooden boxes (ICC-15A, 15B) WIC, not over 50 lb. net wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt.
Benzoyl peroxide, wet (when wet with not less than 50% by weight of water). Shipping containers must have marked thereon the gross, tare, and net weight of the package.	<i>A light, finely divided white crystalline powder in water solution. In dry condition burns rapidly. When in powdered or crystalline form must be wet with at least 50% by weight of water. Check gross weight of container to ascertain if leakage has occurred. Reject leaking containers or ones that show signs of having leaked. Do not stow with explosives, combustible materials, and acids.</i>	Yellow.....	Stowage: "On deck protected." "On deck under cover." "Tween decks readily accessible." Outside containers: Steel barrels or drums (ICC-5, 5B, 6A, 6B, 6C) WIL, not over 350 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt. Fiber drum (ICC-21C) WIC of plastic, not over 225 lb. net wt.

## solids and oxidizing materials—Continued

Required conditions for transportation—Continued		
Passenger vessel	Ferry vessel, passenger or vehicle	R. R. car ferry, passenger or vehicle
Stowage: "On deck under cover." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 1 gal. cap. Not permitted.	Ferry stowage (AA)..... Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12B) WIC, not over 1 gal. cap. (ICC-12B) WIC polyethylene, not over 5 gal. cap. (ICC-12P) WIC ICC-2U, not over 5 gal. cap. Not permitted.	Ferry stowage (BB). Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12B) WIC, not over 1 gal. cap. (ICC-12B) WIC polyethylene, not over 5 gal. cap. (ICC-12P) WIC ICC-2U, not over 5 gal. cap. Not permitted.
Stowage: "On deck under cover." Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 1 gal. cap. Not permitted.	Ferry stowage (AA)..... Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12B) WIC, not over 1 gal. cap. (ICC-12B) WIC polyethylene, not over 5 gal. cap. (ICC-12P) WIC ICC-2U, not over 5 gal. cap. Not permitted.	Ferry stowage (BB). Outside containers: Wooden boxes (ICC-15A, 15B, 15C, 16A, 19A) WIC, not over 250 lb. gr. wt. Fiberboard boxes: (ICC-12B) WIC, not over 1 gal. cap. (ICC-12B) WIC polyethylene, not over 5 gal. cap. (ICC-12P) WIC ICC-2U, not over 5 gal. cap. Not permitted.
Stowage: "On deck under cover." Outside containers: Wooden boxes (ICC-15A, 15B) WIC, not over 50 lb. net wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt.	Ferry stowage (AA). Outside containers: Wooden boxes (ICC-15A, 15B) WIC, not over 50 lb. net wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt.	Ferry stowage (BB). Outside containers: Wooden boxes (ICC-15A, 15B) WIC, not over 50 lb. net wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt.
Stowage: "On deck under cover." Outside containers: Steel barrels or drums (ICC-5, 5B, 6A, 6B, 6C) WIL, not over 350 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt.	Ferry stowage (AA)..... Outside containers: Steel barrels or drums (ICC-5, 5B, 6A, 6B, 6C) WIL, not over 350 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt.	Ferry stowage (BB). Outside containers: Steel barrels or drums (ICC-5, 5B, 6A, 6B, 6C) WIL, not over 350 lb. gr. wt. Wooden boxes (ICC-15A, 15B, 15C) WIMC, not over 200 lb. gr. wt. Fiberboard boxes (ICC-12B) WIC, not over 50 lb. net wt.