



United States of America
 Department of Homeland Security
 United States Coast Guard

Certification Date: 11 Dec 2023
 Expiration Date: 11 Dec 2024

Temporary Certificate of Inspection

For ships on international voyages this certificate fulfills the requirements of SOLAS 74 as amended, regulation V/14, for a SAFE MANNING DOCUMENT.

This Temporary Certificate of Inspection is issued under the provision of Title 46 United States Code, Section 399, in lieu of the regular certificate of inspection, and shall be in force only until the receipt on board said vessel of the original certificate of inspection, this certificate in no case to be valid after one year from the date of inspection.

| Vessel Name | Official Number | IMO Number | Call Sign | Service |
|-------------|-----------------|------------|-----------|------------|
| AL 2301 | 1286364 | | | Tank Barge |

| Hailing Port | Hull Material | Horsepower | Propulsion |
|---------------|---------------|------------|------------|
| HOUSTON, TX | Steel | | |
| UNITED STATES | | | |

| Place Built | Delivery Date | Keel Laid Date | Gross Tons | Net Tons | DWT | Length |
|---------------|---------------|----------------|------------|----------|------|---------|
| HOUSTON, TX | 01Nov2018 | 18Oct2017 | R-1415 | R-1415 | 3750 | R-260.0 |
| UNITED STATES | | | | | | 10 |

| Owner | Operator |
|---|---|
| TVPX 2018-1001 BUSINESS TRUST 39 EAST RIDGE DR NORTH SALT LAKE, UT 84054 UNITED STATES | KIRBY INLAND MARINE LP 55 WAUGH DRIVE SUITE 1000 HOUSTON, TX 77007 UNITED STATES |

This vessel must be manned with the following licensed and unlicensed Personnel. Included in which there must be 0 Certified Lifeboatmen, 0 Certified Tankermen, 0 HSC Type Rating, and 0 GMDSS Operators.

| | | | |
|----------------------------|----------------------|------------------------------|----------|
| 0 Masters | 0 Licensed Mates | 0 Chief Engineers | 0 Oilers |
| 0 Chief Mates | 0 First Class Pilots | 0 First Assistant Engineers | |
| 0 Second Mates | 0 Radio Officers | 0 Second Assistant Engineers | |
| 0 Third Mates | 0 Able Seamen | 0 Third Assistant Engineers | |
| 0 Master First Class Pilot | 0 Ordinary Seamen | 0 Licensed Engineers | |
| 0 Mate First Class Pilots | 0 Deckhands | 0 Qualified Member Engineer | |

In addition, this vessel may carry 0 Passengers, 0 Other Persons in crew, 0 Persons in addition to crew, and no Others. Total Persons allowed: 0

Route Permitted And Conditions Of Operation:
 ---Lakes, Bays, and Sounds---

Also, in fair weather only, not more than twelve (12) miles from shore between St. Marks and Carrabelle, Florida.

This vessel has been granted a fresh water service examination interval in accordance with 46 CFR 31.10-21(a) (2). If this vessel is operated in salt water more than 6 months in any 12 month period, the vessel must be inspected using salt water intervals as per 46 CFR 31.10-21(a) (1) and the cognizant OCMI must be notified in writing as soon as this change in status occurs.

This tank barge is participating in the Eighth and Ninth Coast Guard District's Tank Barge Streamlined

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

With this Inspection for Certification having been completed at Houston, TX, UNITED STATES, the Officer in Charge, Marine Inspection, Sector Houston-Galveston certified the vessel, in all respects, is in conformity with the applicable vessel inspection laws and the rules and regulations prescribed thereunder.

| Annual/Periodic/Re-Inspection | | | | This certificate issued by: Joseph W. Morgan, OIC, USCG, By Direction Officer in Charge, Marine Inspection Sector Houston-Galveston Inspection Zone |
|-------------------------------|------|-------|-----------|---|
| Date | Zone | A/P/R | Signature | |
| | | | | |
| | | | | |
| | | | | |



Temporary Certificate of Inspection

Vessel Name: AL 2301

Inspection Program (TBSIP). Inspection activities aboard this barge shall be conducted in accordance with its Tank Barge Action Plan (TAP). Inspection issues concerning this barge should be directed to OCMI Houston-Galveston.

---Hull Exams---

| Exam Type | Next Exam | Last Exam | Prior Exam |
|--------------------|-----------|-----------|------------|
| DryDock | 30Nov2028 | 01Nov2018 | |
| Internal Structure | 30Nov2028 | 29Nov2023 | 01Nov2018 |

--- Liquid/Gas/Solid Cargo Authority/Conditions ---

Authorization: GRADE "A" AND LOWER AND SPECIFIED HAZARDOUS CARGOES

| Total Capacity | Units | Highest Grade Type | Part151 Regulated | Part153 Regulated | Part154 Regulated |
|----------------|---------|--------------------|-------------------|-------------------|-------------------|
| 25675 | Barrels | A | Yes | No | No |

Hazardous Bulk Solids Authority

Not Authorized

Loading Constraints - Structural

| Tank Number | Max Cargo Weight per Tank (short tons) | Maximum Density (lbs/gal) |
|-------------|--|---------------------------|
| 1 P/S | 492 | 14.91 |
| 2 P/S | 492 | 14.91 |
| 3 P/S | 492 | 14.91 |
| 4 P/S | 492 | 14.91 |

Loading Constraints - Stability

| Hull Type | Maximum Load (short tons) | Maximum Draft (ft/in) | Max Density (lbs/gal) | Route Description |
|-----------|---------------------------|-----------------------|-----------------------|-------------------|
| II | 2648 | 9ft 3in | 11.74 | R, LBS |
| III | 3749 | 11ft 9in | 14.91 | R, LBS |
| II | 2648 | 9ft 3in | 11.74 | R, LBS |
| III | 3749 | 11ft 9in | 14.91 | R, LBS |

Conditions Of Carriage

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA), serial #C1-1802911 dated July 24, 2018, may be carried, and then only in the tanks indicated.

Per 46 CFR 150.130, the Person In Charge of the vessel is responsible for ensuring that the compatibility requirements of 46 CFR 150 are met. Cargoes must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 in conjunction with the reactive group numbers from the "Compat Group No" column listed in the vessel's Cargo Authority Attachment.

When the vessel is carrying cargoes containing greater than 0.5% benzene, the person in charge is responsible for ensuring the provisions of 46 US Code of Federal Regulations Part 197, Subpart C are applied.

In accordance with 46 CFR Part 39, excluding part 39.4000, this vessel's vapor collection system has been inspected to the plans approved by MSC Letter C1-1801505 dated April 25, 2018, and extended by MSC Letter C1-1803704 dated September 28, 2018, and has been found acceptable for the collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column of the vessel's Cargo Authority Attachment. The VCS system has been approved with a pressure side 1.5 psig P/V valve with Coast Guard Approval 162.017/169/2.



Temporary Certificate of Inspection

Vessel Name: AL 2301

--- Inspection Status ---

Cargo Tanks

| Tank Id | Internal Exam | | | External Exam | | |
|---------|---------------|-----------|-----------|---------------|------|------|
| | Previous | Last | Next | Previous | Last | Next |
| 1 P/S | - | 01Nov2018 | 30Nov2028 | - | - | - |
| 2 P/S | - | 01Nov2018 | 30Nov2028 | - | - | - |
| 3 P/S | - | 01Nov2018 | 30Nov2028 | - | - | - |
| 4 P/S | - | 01Nov2018 | 30Nov2028 | - | - | - |

Hydro Test

| Tank Id | Safety Valves | Hydro Test | | |
|---------|---------------|------------|-----------|------|
| | | Previous | Last | Next |
| 1 P/S | - | - | 01Nov2018 | - |
| 2 P/S | - | - | 01Nov2018 | - |
| 3 P/S | - | - | 01Nov2018 | - |
| 4 P/S | - | - | 01Nov2018 | - |

---Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

--- Fire Fighting Equipment ---

Fire Extinguishers - Hand portable and semi-portable

| Quantity | Class Type |
|----------|------------|
| 2 | 40-B |

END



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Shipyard: Southwest Shipyard
Hull #: 9779

46 CFR 151 Tank Group Characteristics

| Tank Group Information | | Cargo Identification | | | Tanks | | | | | Cargo Transfer | | Environmental Control | | Fire Protection Provided | Special Requirements | | | |
|------------------------|-------------------------|----------------------|--------|-------|----------|----------------|---------------------|------|--------|----------------|------|-----------------------|----------------|--------------------------|--|----------|-----------|----|
| Tnk Grp | Tanks in Group | Density | Press. | Temp. | Hull Typ | Cargo Seg Tank | Type | Vent | Gauge | Pipe Class | Cont | Tanks | Handling Space | General | Materials of Construction | Elec Haz | Temp Cont | |
| A | #1P/S,#2P/S,#3P/S,#4P/S | 14.91 | Atmos | Amb | II | 1II 2II | Integral Gravity | PV | Closed | II | G-1 | NR | NA | Portable | 40-1(a), (f)(1), 50-55-1(b), (c), (e), (f), (g), (i), (j), 56-1(a), 70(a), 50-70(b), 50-73, 58-1(a), (d), (e). | | NR | No |

- Notes: 1 Under Environmental Control, Tanks, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo tanks.
 2 Under Environmental Control, Handling Space, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo handling space. NA means that the vessel does not have a cargo control space, and this requirement is not applied.
 3 Under Electrical Hazard Class, NA means that the tank group is suitable only for those cargoes which have no electrical hazard class requirement. NR means that the vessel has no electrical equipment located in a hazardous location.

List of Authorized Cargoes

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|----------------------|-----------|-----------------|-------------|-------|-----------|------------|------------------------|--------------|---|-------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat's of | Insp Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |

Authorized Subchapter O Cargoes

| | | | | | | | | | | |
|--|-----|------|-------|-----|-----|---|-----|-----|---------------------------------|---|
| Sodium acetate solution | SAN | 34 | D/O 3 | # | | A | No | N/A | | |
| Acetic acid | AAC | 4 2 | O | D | III | A | Yes | 1 | 50-73, 55-1(g) | G |
| Acetic anhydride | ACA | 11 | O | D | III | A | Yes | 1 | 50-73, 55-1(g) | G |
| Acetonitrile | ATN | 37 | O | C | III | A | Yes | 3 | No | G |
| Acrylic acid | ACR | 4 2 | O | D | III | A | Yes | 2 | 50-70(a), 50-73, 50-81, 58-1(a) | G |
| Acrylonitrile | ACN | 15 2 | O | C | II | A | Yes | 4 | 50-70(a), 55-1(e) | G |
| Adiponitrile | ADN | 37 | O | E | II | A | Yes | 1 | No | G |
| Alkyl (C7-C9) nitrates | AKN | 34 2 | O | NA | III | A | No | N/A | 50-81, 50-85 | G |
| Aluminum sulfate solution | ASX | 43 2 | O 3 | NA | III | A | No | N/A | 58-1(e) | G |
| Aminoethyl ethanolamine | AEE | 8 | O | E | III | A | Yes | 1 | 55-1(b) | G |
| Ammonium bisulfite solution (70% or less) | ABX | 43 2 | O | NA | III | A | No | N/A | 50-73, 56-1(a), (b), (c) | G |
| Ammonium hydroxide (28% or less NH3) | AMH | 6 | O | NA | III | A | No | N/A | 56-1(a), (b), (c), (f), (g) | G |
| Anthracene oil (Coal tar fraction) | AHO | 33 | O | NA | II | A | No | N/A | No | G |
| Benzene | BNZ | 32 | O | C | III | A | Yes | 1 | 50-60 | G |
| Benzene or hydrocarbon mixtures (having 10% Benzene or more) | BHB | 32 2 | O | C | III | A | Yes | 1 | 50-60 | G |
| Benzene, Toluene, Xylene mixtures (10% Benzene or more) | BTX | 32 | O | B/C | III | A | Yes | 1 | 50-60 | G |
| Butyl acrylate (all isomers) | BAR | 14 | O | D | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G |
| Butyl methacrylate | BMH | 14 | O | D | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G |
| Butyraldehyde (all isomers) | BAE | 19 | O | C | III | A | Yes | 1 | 55-1(h) | G |
| Camphor oil (light) | CPO | 18 | O | D | II | A | No | N/A | No | G |
| Carbon tetrachloride | CBT | 36 | O | NA | III | A | No | N/A | No | G |
| Caustic potash solution | CPS | 5 2 | O | NA | III | A | No | N/A | 50-73, 55-1(i) | G |
| Caustic soda solution | CSS | 5 2 | O | NA | III | A | No | N/A | 50-73, 55-1(i) | G |
| Chemical Oil (refined, containing phenolics) | COD | 21 | O | E | II | A | No | N/A | 50-73 | G |
| Chlorobenzene | CRB | 36 | O | D | III | A | Yes | 1 | No | G |
| Chloroform | CRF | 36 | O | NA | III | A | Yes | 3 | No | G |
| Coal tar naphtha solvent | NCT | 33 | O | D | III | A | Yes | 1 | 50-73 | G |
| Creosole | CCW | 21 2 | O | E | III | A | Yes | 1 | No | G |
| Cresols (all isomers) | CRS | 21 | O | E | III | A | Yes | 1 | No | G |
| Cresylate spent caustic | CSC | 5 | O | NA | III | A | No | N/A | 50-73, 55-1(b) | G |
| Cresylic acid tar | CRX | 21 | O | E | III | A | Yes | 1 | 55-1(f) | G |
| Crotonaldehyde | CTA | 19 2 | O | C | II | A | Yes | 4 | 55-1(h) | G |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 2 of 9

Shipyard Southwest Shipyard
Hull # 9779

| Cargo Identification | | | | | | Conditions of Carriage | | | | |
|--|-----------|------------------|-------------|-------|-----------|------------------------|----------------|--------------|--|-------------|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat's of Construction | Insp Period |
| | | | | | | | App'd (Y or N) | VCS Category | | |
| Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein) | CHG | 19 ² | O | C | III | A | Yes | 1 | No | G |
| Cyclohexanone | CCH | 18 | O | D | III | A | Yes | 1 | 56-1(a), (b) | G |
| Cyclohexanone, Cyclohexanol mixture | CYX | 18 ² | O | E | III | A | Yes | 1 | 56-1 (b) | G |
| Cyclohexylamine | CHA | 7 | O | D | III | A | Yes | 1 | 56-1(a), (b), (c), (g) | G |
| Cyclopentadiene, Styrene, Benzene mixture | CSB | 30 | O | D | III | A | Yes | 1 | 50-60, 56-1(b) | G |
| iso-Decyl acrylate | IAI | 14 | O | E | III | A | Yes | 2 | 50-70(a), 50-81(a), (b), 55-1(c) | G |
| Dichlorobenzene (all isomers) | DBX | 36 | O | E | III | A | Yes | 3 | 56-1(a), (b) | G |
| 1,1-Dichloroethane | DCH | 36 | O | C | III | A | Yes | 1 | No | G |
| 2,2'-Dichloroethyl ether | DEE | 41 | O | D | II | A | Yes | 1 | 55-1(f) | G |
| Dichloromethane | DCM | 36 | O | NA | III | A | Yes | 5 | No | G |
| 2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution | DDE | 43 | O | E | III | A | No | N/A | 56-1(a), (b), (c), (g) | G |
| 2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution | DAD | 0 ^{1,2} | O | A | III | A | No | N/A | 56-1(a), (b), (c), (g) | G |
| 2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution | DTI | 43 ² | O | E | III | A | No | N/A | 56-1(a), (b), (c), (g) | G |
| 1,1-Dichloropropane | DPB | 36 | O | C | III | A | Yes | 3 | No | G |
| 1,2-Dichloropropane | PPP | 36 | O | C | III | A | Yes | 3 | No | G |
| 1,3-Dichloropropane | DPC | 36 | O | C | III | A | Yes | 3 | No | G |
| 1,3-Dichloropropene | DPU | 15 | O | D | II | A | Yes | 4 | No | G |
| Dichloropropene, Dichloropropane mixtures | DMX | 15 | O | C | II | A | Yes | 1 | No | G |
| Diethanolamine | DEA | 8 | O | E | III | A | Yes | 1 | 55-1(c) | G |
| Diethylamine | DEN | 7 | O | C | III | A | Yes | 3 | 55-1(c) | G |
| Diethylenetriamine | DET | 7 ² | O | E | III | A | Yes | 1 | 55-1(c) | G |
| Diisobutylamine | DBU | 7 | O | D | III | A | Yes | 3 | 55-1(c) | G |
| Diisopropanolamine | DIP | 8 | O | E | III | A | Yes | 1 | 55-1(c) | G |
| Diisopropylamine | DIA | 7 | O | C | II | A | Yes | 3 | 55-1(c) | G |
| N,N-Dimethylacetamide | DAC | 10 | O | E | III | A | Yes | 3 | 56-1(b) | G |
| Dimethylethanolamine | DMB | 8 | O | D | III | A | Yes | 1 | 56-1(b), (c) | G |
| Dimethylformamide | DMF | 10 | O | D | III | A | Yes | 1 | 55-1(e) | G |
| Di-n-propylamine | DNA | 7 | O | C | II | A | Yes | 3 | 55-1(c) | G |
| Dodecylidimethylamine, Tetradecylidimethylamine mixture | DOT | 7 | O | E | III | A | No | N/A | 56-1(b) | G |
| Dodecyl diphenyl ether disulfonate solution | DOS | 43 | O | # | II | A | No | N/A | No | G |
| EE Glycol Ether Mixture | EEG | 40 | O | D | III | A | No | N/A | No | G |
| Ethanolamine | MEA | 8 | O | E | III | A | Yes | 1 | 55-1(c) | G |
| Ethyl acrylate | EAC | 14 | O | C | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G |
| Ethylamine solutions (72% or less) | EAN | 7 | O | A | II | A | Yes | 6 | 55-1(b) | G |
| N-Ethylbutylamine | EBA | 7 | O | D | III | A | Yes | 3 | 55-1(b) | G |
| N-Ethylcyclohexylamine | ECC | 7 | O | D | III | A | Yes | 1 | 55-1(b) | G |
| Ethylene cyanohydrin | ETC | 20 | O | E | III | A | Yes | 1 | No | G |
| Ethylenediamine | EDA | 7 ² | O | D | III | A | Yes | 1 | 55-1(c) | G |
| Ethylene dichloride | EDC | 36 ² | O | C | III | A | Yes | 1 | No | G |
| Ethylene glycol hexyl ether | EGH | 40 | O | E | III | A | No | N/A | No | G |
| Ethylene glycol monoalkyl ethers | EGC | 40 | O | D/E | III | A | Yes | 1 | No | G |
| Ethylene glycol propyl ether | EGP | 40 | O | E | III | A | Yes | 1 | No | G |
| 2-Ethylhexyl acrylate | EAI | 14 | O | E | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G |
| Ethyl methacrylate | ETM | 14 | O | D/E | III | A | Yes | 2 | 50-70(a) | G |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 3 of 9

Shipyard Southwest Shipyard
Hull # 9779

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|---|-----------|------------------|----------------|-------|-----------|------------|------------------------|--------------|--|-------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'l's of Construction | Insp Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |
| 2-Ethyl-3-propylacrolein | EPA | 19 ² | O | E | III | A | Yes | 1 | No | G | |
| Formaldehyde solution (37% to 50%) | FMS | 19 ² | O | D/E | III | A | Yes | 1 | 55-1(h) | G | |
| Formic acid | FMA | 4 ² | O | E | III | A | Yes | 1 | 50-73, 55-1(f) | G | |
| Furfural | FFA | 19 | O | D | III | A | Yes | 1 | 55-1(h) | G | |
| Glutaraldehyde solutions (50% or less) | GTA | 19 | O | NA | III | A | No | N/A | No | G | |
| Glyoxylic Acid Solution (50% or less) | GAC | 4 | O | E | III | A | No | N/A | 50-73, 50-81, 58-1(e) | G | |
| Hexamethylenediamine solution | HMC | 7 | O | E | III | A | Yes | 1 | 55-1(c) | G | |
| Hexamethyleneimine | HMI | 7 | O | C | II | A | Yes | 1 | 58-1(b), (c) | G | |
| Hydrocarbon 5-9 | HFN | 31 | O | C | III | A | Yes | 1 | 50-70(a), 50-81(a), (b) | G | |
| Isoprene | IPR | 30 | O | A | III | A | Yes | 7 | 50-70(a), 50-81(a), (b) | G | |
| Isoprene, Pentadiene mixture | IPN | 30 | O | B | III | A | No | N/A | 50-70(a), 55-1(c) | G | |
| Kraft pulping liquors (free alkali content 3% or more)(including Black, Green, or White liquor) | KPL | 5 | O | NA | III | A | No | N/A | 50-73, 58-1(a), (c), (g) | G | |
| Mesityl oxide | MSO | 18 ² | O | D | III | A | Yes | 1 | No | G | |
| Methyl acrylate | MAM | 14 | O | C | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G | |
| Methylcyclopentadiene dimer | MCK | 30 | O | C | III | A | Yes | 1 | No | G | |
| Methyl diethanolamine | MDE | 8 | O | E | III | A | Yes | 1 | 58-1(b), (c) | G | |
| 2-Methyl-5-ethyl pyridine | MEP | 9 | O | E | III | A | Yes | 1 | 55-1(e) | G | |
| Methyl methacrylate | MMM | 14 | O | C | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G | |
| 2-Methylpyridine | MPR | 9 | O | D | III | A | Yes | 3 | 55-1(c) | G | |
| alpha-Methylstyrene | MSR | 30 | O | D | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G | |
| Morpholine | MPL | 7 ² | O | D | III | A | Yes | 1 | 55-1(c) | G | |
| Nitroethane | NTE | 42 | O | D | II | A | No | N/A | 50-81, 58-1(b) | G | |
| 1- or 2-Nitropropane | NPM | 42 | O | D | III | A | Yes | 1 | 50-81 | G | |
| Pentachloroethane | PCE | 36 | O | NA | III | A | No | N/A | No | G | |
| 1,3-Pentadiene | PDE | 30 | O | A | III | A | Yes | 7 | 50-70(a), 50-81 | G | |
| Perchloroethylene | PER | 36 | O | NA | III | A | No | N/A | No | G | |
| Polyethylene polyamines | PEB | 7 ² | O | E | III | A | Yes | 1 | 55-1(a) | G | |
| iso-Propanolamine | MPA | 8 | O | E | III | A | Yes | 1 | 55-1(c) | G | |
| Propanolamine (iso-, n-) | PAX | 8 | O | E | III | A | Yes | 1 | 58-1(b), (c) | G | |
| Propionic acid | PNA | 4 | O | D | III | A | Yes | 1 | 50-73, 55-1(g) | G | |
| Isopropylamine | IPP | 7 | O | A | II | A | Yes | 5 | 55-1(c) | G | |
| Pyridine | PRD | 9 | O | C | III | A | Yes | 1 | 55-1(a) | G | |
| Pyrolysis Gasoline (containing benzene) | PYG | 32 | O | C | II | A | No | N/A | 50-5, 50-80 | G | |
| Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide) | SAP | 5 | O | | III | A | No | N/A | 50-73, 55-1(i) | G | |
| Sodium aluminate solution (45% or less) | SAU | 5 | O | NA | III | A | No | N/A | 50-73, 58-1(a), (b), (c) | G | |
| Sodium chlorate solution (50% or less) | SDD | 0 ^{1,2} | O | NA | III | A | No | N/A | 50-73 | G | |
| Sodium hypochlorite solution (20% or less) | SHQ | 5 | O | NA | III | A | No | N/A | 50-73, 58-1(a), (b) | G | |
| Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less) | SSH | 0 ^{1,2} | O | NA | III | A | Yes | 1 | 50-73, 55-1(b) | G | |
| Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm) | SSI | 0 ^{1,2} | O | NA | III | A | No | N/A | 50-73, 55-1(b) | G | |
| Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm) | SSJ | 0 ^{1,2} | O | NA | II | A | No | N/A | 50-73, 55-1(b) | G | |
| Sodium thiocyanate solution (58% or less) | STS | 0 ^{1,2} | O ³ | NA | III | A | No | N/A | 58-1(a) | G | |
| Styrene (crude) | STX | 30 | O | D | III | A | Yes | 2 | No | G | |
| Styrene monomer | STY | 30 | O | D | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 4 of 9

Shipyard: Southwest Shipyard
Hull #: 9779

| Cargo Identification | | | | | | | Conditions of Carriage | | | | |
|---|-----------|-----------------|-------------|-------|-----------|------------|------------------------|--------------|--|--------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'l's of Construction | Insp. Period | |
| | | | | | | | App'd (Y or N) | VCS Category | | | |
| 1,1,2,2-Tetrachloroethane | TEC | 36 | O | NA | III | A | No | N/A | No | G | |
| Tetraethylene pentamine | TTP | 7 | O | E | III | A | Yes | 1 | 55-1(c) | G | |
| Tetrahydrofuran | THF | 41 | O | C | III | A | Yes | 1 | 50-70(b) | G | |
| o-Toluidine | TLI | 9 | O | E | II | A | Yes | 3 | 50-5, 50-73 | G | |
| 1,2,4-Trichlorobenzene | TCB | 36 | O | E | III | A | Yes | 1 | No | G | |
| 1,1,2-Trichloroethane | TCM | 36 | O | NA | III | A | Yes | 1 | 50-73, 58-1(a) | G | |
| Trichloroethylene | TCL | 36 ² | O | NA | III | A | Yes | 1 | No | G | |
| 1,2,3-Trichloropropane | TCN | 36 | O | E | II | A | Yes | 3 | 50-73, 58-1(a) | G | |
| Triethanolamine | TEA | 8 ² | O | E | III | A | Yes | 1 | 55-1(b) | G | |
| Triethylamine | TEN | 7 | O | C | II | A | Yes | 3 | 55-1(e) | G | |
| Triethylenetetramine | TET | 7 ² | O | E | III | A | Yes | 1 | 55-1(b) | G | |
| Triphenylborane (10% or less), caustic soda solution | TPB | 5 | O | NA | III | A | No | N/A | 58-1(a), (b), (c) | G | |
| Trisodium phosphate solution | TSP | 5 | O | NA | III | A | No | N/A | 50-73, 58-1(a), (c) | G | |
| Urea, Ammonium nitrate solution (containing more than 2% NH3) | UAS | 6 | O | NA | III | A | No | N/A | 58-1(b) | G | |
| Vanillin black liquor (free alkali content, 3% or more) | VBL | 5 | O | NA | III | A | No | N/A | 50-73, 58-1(a), (c), (g) | G | |
| Vinyl acetate | VAM | 13 | O | C | III | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G | |
| Vinyl neodecanoate | VND | 13 | O | E | III | A | No | N/A | 50-70(a), 50-81(a), (b) | G | |
| Vinyltoluene | VNT | 13 | O | D | III | A | Yes | 2 | 50-70(a), 50-81, 58-1(a), (b), (c), (| G | |

Subchapter D Cargoes Authorized for Vapor Control

| | | | | | | | | | |
|---|-----|-----------------|---|---|--|---|-----|---|--|
| Acetone | ACT | 18 ² | D | C | | A | Yes | 1 | |
| Acetophenone | ACP | 18 | D | E | | A | Yes | 1 | |
| Alcohol (C6-C17) (secondary) poly(3-8) ethoxylates | AEA | 20 | D | E | | A | Yes | 1 | |
| Alcohol (C6-C17) (secondary) poly(7-12) ethoxylates | AEB | 20 | D | E | | A | Yes | 1 | |
| Amyl acetate (all isomers) | AEC | 34 | D | D | | A | Yes | 1 | |
| Amyl alcohol (iso-, n-, sec-, primary) | AAI | 20 | D | D | | A | Yes | 1 | |
| Benzyl acetate | BZE | 34 | D | E | | A | Yes | 1 | |
| Benzyl alcohol | BAL | 21 | D | E | | A | Yes | 1 | |
| Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters) | BFY | 20 | D | E | | A | Yes | 1 | |
| Butyl acetate (all isomers) | BAX | 34 | D | D | | A | Yes | 1 | |
| Isobutyl alcohol | IAL | 20 ² | D | D | | A | Yes | 1 | |
| Butyl alcohol (n-) | BAN | 20 ² | D | D | | A | Yes | 1 | |
| Butyl alcohol (sec-) | BAS | 20 ² | D | C | | A | Yes | 1 | |
| Butyl alcohol (tert-) | BAT | 20 ² | D | C | | A | Yes | 1 | |
| Butyl benzyl phthalate | BPH | 34 | D | E | | A | Yes | 1 | |
| Butyl toluene | BUE | 32 | D | D | | A | Yes | 1 | |
| Caproactam solutions | CLS | 22 | D | E | | A | Yes | 1 | |
| Cycloheptane | CYE | 31 | D | C | | A | Yes | 1 | |
| Cyclohexane | CHX | 31 | D | C | | A | Yes | 1 | |
| Cyclohexanol | CHN | 20 | D | E | | A | Yes | 1 | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 5 of 9

Shipyard Southwest Shipyard
Hull #: 9779

| Cargo Identification | | | | | | Conditions of Carriage | | | | |
|--|-----------|-----------------|-------------|-------|-----------|------------------------|----------------|--------------|---|-------------|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'ls of Construction | Insp Period |
| | | | | | | | App'd (Y or N) | VCS Category | | |
| Cyclohexyl acetate | CYC | 34 | D | D | | A | Yes | 1 | | |
| 1,3-Cyclopentadiene dimer (molten) | CPD | 30 | D | D/E | | A | Yes | 2 | | |
| Cyclopentane | CYP | 31 | D | B | | A | Yes | 1 | | |
| p-Cymene | CMP | 32 | D | D | | A | Yes | 1 | | |
| iso-Decaldehyde | IDA | 19 | D | E | | A | Yes | 1 | | |
| n-Decaldehyde | DAL | 19 | D | E | | A | Yes | 1 | | |
| Decanoic acid | DCO | 4 | D | # | | A | Yes | 1 | | |
| Decene | DCE | 30 | D | D | | A | Yes | 1 | | |
| Decyl alcohol (all isomers) | DAX | 20 ² | D | E | | A | Yes | 1 | | |
| n-Decylbenzene. see Alkyl(C9+)benzenes | DBZ | 32 | D | E | | A | Yes | 1 | | |
| Diacetone alcohol | DAA | 20 ² | D | D | | A | Yes | 1 | | |
| Dibutyl phthalate | DPA | 34 | D | E | | A | Yes | 1 | | |
| Diethylbenzene | DEB | 32 | D | D | | A | Yes | 1 | | |
| Diethylene glycol | DEG | 40 ² | D | E | | A | Yes | 1 | | |
| Diisobutylene | DBL | 30 | D | C | | A | Yes | 1 | | |
| Diisobutyl ketone | DIK | 18 | D | D | | A | Yes | 1 | | |
| Diisopropylbenzene (all isomers) | DIX | 32 | D | E | | A | Yes | 1 | | |
| Dimethyl phthalate | DTL | 34 | D | E | | A | Yes | 1 | | |
| Dioctyl phthalate | DOP | 34 | D | E | | A | Yes | 1 | | |
| Dipentene | DPN | 30 | D | D | | A | Yes | 1 | | |
| Diphenyl | DIL | 32 | D | D/E | | A | Yes | 1 | | |
| Diphenyl, Diphenyl ether mixtures | DDO | 33 | D | E | | A | Yes | 1 | | |
| Diphenyl ether | DPE | 41 | D | {E} | | A | Yes | 1 | | |
| Dipropylene glycol | DPG | 40 | D | E | | A | Yes | 1 | | |
| Distillates. Flashed feed stocks | OFF | 33 | D | E | | A | Yes | 1 | | |
| Distillates. Straight run | DSR | 33 | D | E | | A | Yes | 1 | | |
| Dodecene (all isomers) | DOZ | 30 | D | D | | A | Yes | 1 | | |
| Dodecylbenzene. see Alkyl(C9+)benzenes | DDB | 32 | D | E | | A | Yes | 1 | | |
| 2-Ethoxyethyl acetate | EEA | 34 | D | D | | A | Yes | 1 | | |
| Ethoxy triglycol (crude) | ETG | 40 | D | E | | A | Yes | 1 | | |
| Ethyl acetate | ETA | 34 | D | C | | A | Yes | 1 | | |
| Ethyl acetoacetate | EAA | 34 | D | E | | A | Yes | 1 | | |
| Ethyl alcohol | EAL | 20 ² | D | C | | A | Yes | 1 | | |
| Ethylbenzene | ETB | 32 | D | C | | A | Yes | 1 | | |
| Ethyl butanol | EBT | 20 | D | D | | A | Yes | 1 | | |
| Ethyl tert-butyl ether | EBE | 41 | D | C | | A | Yes | 1 | | |
| Ethyl butyrate | EBR | 34 | D | D | | A | Yes | 1 | | |
| Ethyl cyclohexane | ECY | 31 | D | D | | A | Yes | 1 | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 6 of 9

Shipyard: Southwest Shipyard
Hull #: 9779

| Cargo Identification | | | | | | Conditions of Carriage | | | | |
|--|-----------|-----------------|-------------|-------|-----------|------------------------|----------------|--------------|--|-------------|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat's of Construction | Insp Period |
| | | | | | | | App'd (Y or N) | VCS Category | | |
| Ethylene glycol | EGL | 20 ² | D | E | | A | Yes | 1 | | |
| Ethylene glycol butyl ether acetate | EMA | 34 | D | E | | A | Yes | 1 | | |
| Ethylene glycol diacetate | EGY | 34 | D | E | | A | Yes | 1 | | |
| Ethylene glycol phenyl ether | EPE | 40 | D | E | | A | Yes | 1 | | |
| Ethyl-3-ethoxypropionate | EEP | 34 | D | D | | A | Yes | 1 | | |
| 2-Ethylhexanol | EHX | 20 | D | E | | A | Yes | 1 | | |
| Ethyl propionate | EPR | 34 | D | C | | A | Yes | 1 | | |
| Ethyl toluene | ETE | 32 | D | D | | A | Yes | 1 | | |
| Formamide | FAM | 10 | D | E | | A | Yes | 1 | | |
| Furfuryl alcohol | FAL | 20 ² | D | E | | A | Yes | 1 | | |
| Gasoline blending stocks Alkylates | GAK | 33 | D | A/C | | A | Yes | 1 | | |
| Gasoline blending stocks Reformates | GRF | 33 | D | A/C | | A | Yes | 1 | | |
| Gasolines Automotive (containing not over 4 23 grams lead per | GAT | 33 | D | C | | A | Yes | 1 | | |
| Gasolines Aviation (containing not over 4 86 grams of lead per gallon) | GAV | 33 | D | C | | A | Yes | 1 | | |
| Gasolines Casinghead (natural) | GCS | 33 | D | A/C | | A | Yes | 1 | | |
| Gasolines Polymer | GPL | 33 | D | A/C | | A | Yes | 1 | | |
| Gasolines Straight run | GSR | 33 | D | A/C | | A | Yes | 1 | | |
| Glycerine | GCR | 20 ² | D | E | | A | Yes | 1 | | |
| Heptane (all isomers) see Alkanes (C6-C9) (all isomers) | HMX | 31 | D | C | | A | Yes | 1 | | |
| n-Heptanoic acid | HEN | 4 | D | E | | A | Yes | 1 | | |
| Heptanol (all isomers) | HTX | 20 | D | D/E | | A | Yes | 1 | | |
| Heptene (all isomers) | HPX | 30 | D | C | | A | Yes | 2 | | |
| Heptyl acetate | HPE | 34 | D | E | | A | Yes | 1 | | |
| Hexane (all isomers) see Alkanes (C6-C9) | HXS | 31 ² | D | B/C | | A | Yes | 1 | | |
| Hexanoic acid | HXO | 4 | D | E | | A | Yes | 1 | | |
| Hexanol | HXN | 20 | D | D | | A | Yes | 1 | | |
| Hexene (all isomers) | HEX | 30 | D | C | | A | Yes | 2 | | |
| Hexylene glycol | HXG | 20 | D | E | | A | Yes | 1 | | |
| Isophorone | IPH | 18 ² | D | E | | A | Yes | 1 | | |
| Jet fuel JP-4 | JPF | 33 | D | E | | A | Yes | 1 | | |
| Jet fuel JP-5 (kerosene heavy) | JPV | 33 | D | D | | A | Yes | 1 | | |
| Kerosene | KRS | 33 | D | D | | A | Yes | 1 | | |
| Methyl acetate | MTT | 34 | D | D | | A | Yes | 1 | | |
| Methyl alcohol | MAL | 20 ² | D | C | | A | Yes | 1 | | |
| Methylamyl acetate | MAC | 34 | D | D | | A | Yes | 1 | | |
| Methylamyl alcohol | MAA | 20 | D | D | | A | Yes | 1 | | |
| Methyl amyl ketone | MAK | 18 | D | D | | A | Yes | 1 | | |
| Methyl tert-butyl ether | MBE | 41 ² | D | C | | A | Yes | 1 | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 7 of 9

Shipyard: Southwest Shipyard
Hull #: 9779

| Cargo Identification | | | | | | Conditions of Carriage | | | | |
|---|-----------|-----------------|-------------|-------|-----------|------------------------|----------------|--------------|--|-------------|
| Name | Chem Code | Compet Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat's of Construction | Insp Period |
| | | | | | | | App'd (Y or N) | VCS Category | | |
| Methyl butyl ketone | MBK | 18 | D | C | | A | Yes | 1 | | |
| Methyl butyrate | MBU | 34 | D | C | | A | Yes | 1 | | |
| Methylcyclohexane | MCY | 31 | D | C | | A | Yes | 1 | | |
| Methyl ethyl ketone | MEK | 18 ² | D | C | | A | Yes | 1 | | |
| Methyl heptyl ketone | MHK | 18 | D | D | | A | Yes | 1 | | |
| Methyl isobutyl ketone | MIK | 18 ² | D | C | | A | Yes | 1 | | |
| Mineral spirits | MNS | 33 | D | D | | A | Yes | 1 | | |
| Myrcene | MRE | 30 | D | D | | A | Yes | 1 | | |
| Naphtha Heavy | NAG | 33 | D | # | | A | Yes | 1 | | |
| Naphtha Petroleum | PTN | 33 | D | # | | A | Yes | 1 | | |
| Naphtha Solvent | NSV | 33 | D | D | | A | Yes | 1 | | |
| Naphtha Stoddard solvent | NSS | 33 | D | D | | A | Yes | 1 | | |
| Naphtha Varnish makers and painters (75%) | NVM | 33 | D | C | | A | Yes | 1 | | |
| Nonane (all isomers), see Alkanes (C6-C9) | NAX | 31 | D | D | | A | Yes | 1 | | |
| Nonene (all isomers) | NON | 30 | D | D | | A | Yes | 2 | | |
| Nonyl alcohol (all isomers) | NNS | 20 ² | D | E | | A | Yes | 1 | | |
| Nonyl phenol | NNP | 21 | D | E | | A | Yes | 1 | | |
| Nonyl phenol poly(4+)ethoxylates | NPE | 40 | D | E | | A | Yes | 1 | | |
| Octane (all isomers), see Alkanes (C6-C9) | OAX | 31 | D | C | | A | Yes | 1 | | |
| Octanoic acid (all isomers) | OAY | 4 | D | E | | A | Yes | 1 | | |
| Octanol (all isomers) | OCX | 20 ² | D | E | | A | Yes | 1 | | |
| Octene (all isomers) | OTX | 30 | D | C | | A | Yes | 2 | | |
| Oil, fuel No 2 | OTW | 33 | D | D/E | | A | Yes | 1 | | |
| Oil, fuel No 2-D | OTD | 33 | D | D | | A | Yes | 1 | | |
| Oil, fuel No 4 | OFR | 33 | D | D/E | | A | Yes | 1 | | |
| Oil, fuel No 5 | OFV | 33 | D | D/E | | A | Yes | 1 | | |
| Oil, fuel No 6 | OSX | 33 | D | E | | A | Yes | 1 | | |
| Oil, misc: Crude | OIL | 33 | D | A/D | | A | Yes | 1 | | |
| Oil, misc: Diesel | ODS | 33 | D | D/E | | A | Yes | 1 | | |
| Oil, misc: Gas, high pour | OGP | 33 | D | E | | A | Yes | 1 | | |
| Oil, misc: Lubricating | OLB | 33 | D | E | | A | Yes | 1 | | |
| Oil, misc: Residual | ORL | 33 | D | E | | A | Yes | 1 | | |
| Oil, misc: Turbine | OTB | 33 | D | E | | A | Yes | 1 | | |
| Pentane (all isomers) | PTY | 31 | D | A | | A | Yes | 5 | | |
| Pentene (all isomers) | PTX | 30 | D | A | | A | Yes | 5 | | |
| n-Pentyl propionate | PPE | 34 | D | D | | A | Yes | 1 | | |
| alpha-Pinene | PIO | 30 | D | D | | A | Yes | 1 | | |
| beta-Pinene | PIP | 30 | D | D | | A | Yes | 1 | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 8 of 9

Shipyards: Southwest Shipyards
Hull #: 9779

| Cargo Identification | | | | | | Conditions of Carriage | | | | |
|--|-----------|-------------------|-------------|-------|-----------|------------------------|----------------|--------------|---|-------------|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor Recovery | | Special Requirements in 46 CFR 151 General and Mat'ls of Construction | Insp Period |
| | | | | | | | App'd (Y or N) | VCS Category | | |
| Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether | PAG | 40 | D | E | | A | Yes | 1 | | |
| Poly(2-8)alkylene glycol monoalkyl (C1-C6) ether acetate | PAF | 34 | D | E | | A | Yes | 1 | | |
| Polybutene | PLB | 30 | D | E | | A | Yes | 1 | | |
| Polypropylene glycol | PGC | 40 | D | E | | A | Yes | 1 | | |
| Isopropyl acetate | IAC | 34 | D | C | | A | Yes | 1 | | |
| n-Propyl acetate | PAT | 34 | D | C | | A | Yes | 1 | | |
| Isopropyl alcohol | IPA | 20 ^{2,3} | D | C | | A | Yes | 1 | | |
| n-Propyl alcohol | PAL | 20 ² | D | C | | A | Yes | 1 | | |
| Propylbenzene (all isomers) | PBY | 32 | D | D | | A | Yes | 1 | | |
| Isopropylcyclohexane | IPX | 31 | D | D | | A | Yes | 1 | | |
| Propylene glycol | PPG | 20 ² | D | E | | A | Yes | 1 | | |
| Propylene glycol methyl ether acetate | PGN | 34 | D | D | | A | Yes | 1 | | |
| Propylene tetramer | PTT | 30 | D | D | | A | Yes | 1 | | |
| Sulfolane | SFL | 39 | D | E | | A | Yes | 1 | | |
| Tetraethylene glycol | TTG | 40 | D | E | | A | Yes | 1 | | |
| Tetrahydronaphthalene | THN | 32 | D | E | | A | Yes | 1 | | |
| Toluene | TOL | 32 | D | C | | A | Yes | 1 | | |
| Tricresyl phosphate (containing less than 1% ortho isomer) | TCP | 34 | D | E | | A | Yes | 1 | | |
| Triethylbenzene | TEB | 32 | D | E | | A | Yes | 1 | | |
| Triethylene glycol | TEG | 40 | D | E | | A | Yes | 1 | | |
| Triethyl phosphate | TPS | 34 | D | E | | A | Yes | 1 | | |
| Trimethylbenzene (all isomers) | TRE | 32 | D | (D) | | A | Yes | 1 | | |
| Trixylyl phosphate | TRP | 34 | D | E | | A | Yes | 1 | | |
| 1-Undecene | UDC | 30 | D | D/E | | A | Yes | 1 | | |
| 1-Undecyl alcohol | UND | 20 | D | E | | A | Yes | 1 | | |
| Xylenes (ortho-, meta-, para-) | XLX | 32 | D | D | | A | Yes | 1 | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: AL 2301
Official #: 1286364

Page 9 of 9

Shipyard: Southwest Shi
Hull #: 9779

Explanation of terms & symbols used in the Table:

Cargo Identification

| | |
|--|--|
| Name | The proper shipping name as listed in 46 CFR Table 30 25-1, 46 CFR Table 151 05, and 46 CFR Part 153 Table 2 |
| Chem Code none | The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual. Certain mixtures of cargoes may not have a CHRIS Code assigned. |
| Compatibility Group No | The cargo reactive group number assigned for compatibility determinations in 46 CFR Part 150 Tables I and II. In accordance with 46 CFR 150.130, the Person-in-Charge of the barge is responsible for ensuring that the compatibility requirements of 46 CFR Part 150 are met. Cargoes must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 in conjunction with the assigned reactive group number. |
| Note 1 | Because of the very high reactivity or unusual conditions of carriage or potential compatibility problems, this product is not assigned to a specific group in the Compatibility Chart. For additional compatibility information, contact Commandant (CG-3PSO-3), U S Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001 Telephone (202) 372-1425 |
| Note 2 | See Appendix I to 46 CFR Part 150 - exceptions to the compatibility chart. |
| Subchapter Subchapter D Subchapter O Note 3 | The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified. Those flammable and combustible liquids listed in 46 CFR Table 30 25-1 Those hazardous cargoes listed in 46 CFR Table 151 05 and 46 CFR Part 153 Table 2 Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges |
| Grade | The cargo classification assigned to each flammable or combustible liquid. Grades inside of "[]" indicate a provisional assignment based upon literature sources which were not verified by manufacturers data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo. |
| A, B, C | Flammable liquid cargoes, as defined in 46 CFR 30-10 22 |
| D, E | Combustible liquid cargoes, as defined in 46 CFR 30-10 15 |
| Note 4 | The flammability/combustibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo. |
| NA | Those subchapter O cargoes which are not classified as a flammable or combustible liquid. |
| # | No flammability/combustibility grade has been assigned yet as the necessary flash point/vapor pressure data for such assignments are presently not available. |
| Hull Type I II III NA | The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151 10-1 Designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151 10-1(b)(1) Designed to carry products which require significant preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151 10-1(b)(3) Designed to carry products of sufficient hazard to require a moderate degree of control. See 46 CFR 151 10-1(b)(4) Not applicable to barges certificated under Subchapter D. |

Conditions of Carriage

| | |
|-------------------------------------|--|
| Tank Group | The vessel's tank group (as defined in Section 4) which is authorized for carriage of the named cargo. |
| Vapor Recovery Approved (Y or N) | Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo. No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo. |

Conditions of Carriage

| | |
|-------------------------------------|--|
| Tank Group | The vessel's tank group (as defined under the "46 CFR Tank Group Characteristics" listed on page 1) which is authorized for carriage of the named cargo. |
| Vapor Recovery Approved (Y or N) | Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified cargo. No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo. |
| VCS Category | The specified cargo's provisional classification for vapor control systems. |
| Category 1 | (No additional VCS requirements above those for benzene, gasolines and crude oil) All requirements applying to the handling of oil and hazardous materials in Titles 33 and 46 Code of Federal Regulations (CFR) apply to these cargoes. Those specifically dealing with vapor control systems are in 33 CFR 155.750, 33 CFR 155.120, 33 CFR 155.170, 46 CFR 35.35 and 46 CFR 39. The cargo tank venting system calculations (46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.30-1(b)) must use appropriate friction factors, vapor densities and vapor growth rates. |
| Category 2 | (Polymerizes) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety components and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine Inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation arrester. |
| Category 3 | (Highly toxic) VCSs for these toxic cargoes cannot use a spill valve or rupture disk as the primary means to meet the overflow protection requirement of 46 CFR 39.20-9. This requirement is in addition to the requirements of Category 1. |
| Category 4 | (Polymerizes and highly toxic) Must comply with requirements of Categories 1, 2 and 3. |
| Category 5 | (High vapor pressure) VCS pressure drop calculations for cargoes with a vapor pressure greater than 14.7 psia at 115 F must take into account increased vapor-air mixture densities and vapor growth rates as compared to Category 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This requirement is in addition to the requirements of Category 1. |
| Category 6 | (High vapor pressure and highly toxic) Must comply with requirements of Categories 1, 3 and 5. |
| Category 7 | (High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5. |
| none | The cargo has not been evaluated/classified for use in vapor control systems. |