

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

Certification Date: 22 Mar 2022 Expiration Date: 22 Mar 2027

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

| KIRBY 100 | 70 | | Official Number | | nber | Call Sign | Service | |
|---|--|---|---|--|---|---|---|---|
| | 170 | | 1192495 | | | | Tank B | arge |
| Haiting Port | | | Hull Material | Hors | epower | Propulsion | | |
| - THEIR OF | | | Steel | | | | | |
| UNITED S | TATES | | | | | | | • |
| Place Built | | | Delivery Date | Keel Laid Date | Gross Tons | Net Tons | | |
| PALACIOS | , TX | | 05 10-2007 | | R-705 | R-705 | DWT | Length * R-200.0 |
| UNITED ST | TATES | | 05Jan2007 | 04Sep2006 | t- | 1- | | 10 |
| Owner KIRBY INI A | | <u> </u> | | Operato | | | | |
| | DR.STE_1000 | | | | 0 MARKET | MARINE, LP | | |
| HOUSTON, | | | | CHA | NNELVIEW | , TX 77530 | | |
| | AIES | | - | | ED STATE: | | | |
| This vessel r 0 Certified L | must be manned ifeboatmen, 0 C | with the fo ertified Tan | llowing licensed kermen, 0 HSC | and unlicensed Type Rating, a | Personnel. and 0 GMDS | Included in wi | nich there mu | st be |
| 0 Masters | | Licensed Ma | | Engineers | 0 01 | | | |
| 0 Chief Mate | es (| First Class F | Pilots 0 First A | ssistant Engineer | S | | | |
| 0 Second M | ates (| Radio Office | rs 0 Secon | d Assistant Engin | eers | | | |
| 0 Third Mate | | Able Seame | 1 O Third A | Assistant Enginee | ŕs | | | |
| | | Ordinary Sea | imen O Licens | ed Engineers | | | | |
| 0 Mate First | | Deckhands | 0 Qualifi | ed Member Engin | eer | | | |
| In addition, the Persons allow | nis vessel may ca | arry 0 Pass | engers, 0 Other | Persons in cre | w, 0 Person | s in addition to | crew, and no | Others. Total |
| | NGQ, U | | | | | | | |
| Route Pern | | litions Of (| Deration: | | | | | |
| | nitted And Cond | | | Coastwico | | | ~ | <u> </u> |
| Lakes, | nitted And Cond Bays, and S | ounds p | lus Limited | | | | <u>.</u> | <u> </u> |
| Lakes, | nitted And Conc Bays, and S | ounds p | lus Limited | | | 2 miles offsh | ore between | St. Marks |
| Lakes, Limited Coas Carrabelle, This vessel (2). If thi inspected us | nitted And Conc Bays, and S | ounds p med fair ed a fress erated in interval | weather voyage water service salt water more a per 46 CFR 3 | s only, not m e examination | ore than 1 | in accordance | with 46 CFI | 31.10-21(a) |
| Lakes, Limited Coas Carrabelle, This vessel (2). If thi inspected us soon as this | nitted And Conc Bays, and S stwise on unmar FL. has been grant is vessel is op sing salt water change in sta | ed a fress erated in interval: tus occurs | weather voyage water service salt water mos s per 46 CFR 32 s. | s only, not m e examination re than 6 mon 1.10-21(a)(1) | nore than 1 interval ths in any and the c | in accordance | with 46 CFI | 31.10-21(a) |
| Lakes, Limited Coas Carrabelle, This vessel (2). If thi inspected us soon as this | nitted And Conc Bays, and S stwise on unmar FL. has been grant is vessel is op sing salt water change in sta | ounds p ned fair ed a fres erated in interval: tus occur: | Weather voyage h water service salt water more s per 46 CFR 32 AL CERTIFICA | s only, not m e examination re than 6 mon 1.10-21(a)(1) ATE INFORM/ | nore than 1 interval ths in any and the c ATION*** | in accordance 12 month per ognizant OCMI | with 46 CFI iod, the ves notified in | R 31.10-21(a) ssel must be n writing as |
| Lakes, Limited Coas Carrabelle, This vessel (2). If this inspected us soon as this ***SEE NE> With this Inspection, Ma | nitted And Conc Bays, and S stwise on unmar FL. has been grant is vessel is op sing salt water change in sta CT PAGE FOR ection for Certific arine Safety Unit | ounds p aned fair ed a fress erated in intervals tus occurs ADDITION ation havin Pittsburgh | A water services a water services a per 46 CFR 31 AL CERTIFICA g been complete certified the ves | s only, not m e examination re than 6 mon 1.10-21(a)(1) ATE INFORM, ed at Wilmingto sel in all respe | ATION*** | in accordance 12 month per ognizant OCMI | with 46 CFI iod, the ves notified in | 31.10-21(a) |
| Lakes, Limited Coas Carrabelle, This vessel (2). If this inspected us soon as this ***SEE NE> With this Inspection, Ma | nitted And Conc Bays, and S stwise on unmar FL. has been grant is vessel is op sing salt water is change in sta CT PAGE FOR | ounds p aned fair ed a frest erated in interval: tus occurs ADDITION ation havin Pittsburgh ons prescri | A water service salt water more per 46 CFR 32 AL CERTIFICA g been complete certified the ves bed thereunder. | s only, not m e examination re than 6 mon 1.10-21(a)(1) ATE INFORM, ed at Wilmingto sel, in all respe | ATION*** ATION*** on, DE, UNI | in accordance 12 month per ognizant OCMI TED STATES, nformity with th | with 46 CFI iod, the ves notified in | R 31.10-21(a) ssel must be n writing as |
| Lakes, Limited Coas Carrabelle, This vessel (2). If this inspected us soon as this ***SEE NE> With this Inspection, Ma | nitted And Conc Bays, and S stwise on unmar FL. has been grant is vessel is op sing salt water change in sta CT PAGE FOR ection for Certific arine Safety Unit ules and regulat | ounds p aned fair ed a frest erated in interval: tus occurs ADDITION ation havin Pittsburgh ons prescri | A water service salt water mois per 46 CFR 3 AL CERTIFICA g been complete certified the ves bed thereunder. ection | s only, not m e examination re than 6 mon 1.10-21 (a) (1) ATE INFORM, ed at Wilmingto sel, in all respe | ATION*** On, DE, UNI os certificate | in accordance 12 month per ognizant OCMI TED STATES, nformity with th ssued by: | with 46 CFI iod, the ves notified in the Officer in e applicable v | Charge, Marine |
| Lakes, Limited Coas Carrabelle, This vessel (2). If this inspected us soon as this ***SEE NE> With this Inspection, Ma aws and the r | nitted And Cond Bays, and S stwise on unmar FL. has been grant is vessel is op sing salt water change in sta (T PAGE FOR ection for Certific arine Safety Unit ules and regulat Annual/Perio | ounds p aned fair ed a frest erated in interval: tus occurs ADDITION ation havin Pittsburgh ons prescri dic/Re-Insp | A water service salt water more per 46 CFR 3 AL CERTIFICA g been complete certified the ves bed thereunder. ection | s only, not m e examination re than 6 mon 1.10-21 (a) (1) ATE INFORM, ed at Wilmingto sel, in all respe | ATION*** on, DE, UNI ects, is in consistent of the construction of the construction of | in accordance 12 month per ognizant OCMI TED STATES, nformity with th ssued by: J.VELEZ Con | with 46 CFI iod, the ves notified in the Officer in e applicable v | Charge, Marine |
| Lakes, Limited Coas Carrabelle, This vessel (2). If this inspected us soon as this ***SEE NE> With this Inspection, Ma aws and the r | nitted And Cond Bays, and S stwise on unmar FL. has been grant is vessel is op ing salt water change in sta CT PAGE FOR ection for Certific arine Safety Unit ules and regulat Annual/Perior Zone | ounds p aned fair ed a frest erated in interval tus occurs ADDITION ation havin Pittsburgh ons prescri dic/Re-Insp | A water service salt water mois per 46 CFR 3 AL CERTIFICA g been complete certified the ves bed thereunder. ection | s only, not m e examination re than 6 mon 1.10-21 (a) (1) ATE INFORM, ed at Wilmingto sel, in all resper- This true () Office | ATION*** ATION*** on, DE, UNI ects, is in con s certificate E. | in accordance 12 month per ognizant OCMI TED STATES, nformity with th ssued by: J.VELEZ Con | with 46 CFI iod, the ves notified in the Officer in e applicable v umander, US | CG |



United States of America Department of Homeland Security United States Coast Guard Certification Date: 22 Mar 2022 Expiration Date: 22 Mar 2027

Certificate of Inspection

Vessel Name: KIRBY 10070

This tank barge is participating in the Eighth-Ninth Coast Guard District's Tank Barge Streamlined 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 Exam | S | | | | |
|--------------------|----------------------|--------------------------|-------------------|-------------------|-------------------|
| Exam Type | Nex | Exam | Last Exam | Prior Exa | am |
| DryDock | 17Fe | eb2027 | 17Feb2017 | 02Jan20 | 07 |
| Internal Structure | e 31M | ar2027 | 22Mar2022 | 17Feb20 |)17 |
| Liquid/Ga | s/Solid Cargo | Authority/Condition | ons | | |
| Authorization: | Grade A and Lowe | er and Specified Hazardo | ous Cargoes | | |
| Total Capacity | Units | Highest Grade Type | Part151 Regulated | Part153 Regulated | Part154 Regulated |
| 10338 | Barrels | А | Yes | No | Νο |
| *Hazardous Bu | lk Solids Authority | * | | | |
| *Loading Const | raints - Structural' | | | | |

Tank NumberMax Cargo Weight per Tank (short tons)Maximum Density (lbs/gal)155513.6262813.6355813.6

Loading Constraints - Stability

| Hull Type | Maximum Load (short tons) | Maximum Draft (ft/in) | Max Density (lbs/gal) | Route Description |
|-----------|------------------------------|--------------------------|--------------------------|-------------------|
| П | 1337 | 9ft 0in | 13.6 | LBS, LC 0-12 |
| Ш | 1433 | 9ft 6in | 11.2 | LBS, LC 0-12 |
| Ш | 1659 | 9ft 9in | 8.7 | LBS, LC 0-12 |
| П | 1337 | 9ft 0in | 13.6 | R |
| Ш | 1433 | 9ft 6in | 11.2 | R |
| Ш | 1659 | 9ft 9in | 8.7 | R |

Conditions Of Carriage

Only Grade A and lower cargoes and specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial #C2-0802979, dated 06OCT2008, may be carried. The specified hazardous cargoes may be carried only in the tanks indicated.

Per 46 CFR 150.130, the Person in Charge of the barge 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.

The maximum design density of cargo which may be filled to the tank top is 7.70 lbs/gal. Cargoes with higher densities, up to 13.58 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed below.

Per 46 CFR 151.10-15 (c) (2) the maximum tank weights listed above reflect uniform (within 5%) loading at the deepest draft allowed. When carry Subchapter "O" cargoes at shallower drafts, the barge should always be loaded uniformly.

In accordance with 46 CFR Part 39, excluding part 39.40, this vessel's vapor collection system has been inspected to the



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plans approved by Marine Safety Center letter Serial #C1-0602900 dated 28SEP2006, 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.

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

The cargo tank top is suitable for a maximum allowable working pressure (MAWP) of 1.7 psig.

--- Inspection Status ---

Cargo Tanks

| | Internal Exam | ı | | External Exar | n | |
|---------|---------------|-----------|------------|---------------|------|------|
| Tank Id | Previous | Last | Next | Previous | Last | Next |
| 1 | 02Jan2007 | 17Feb2017 | 17Feb2027 | - | - | - |
| 2 | 02Jan2007 | 17Feb2017 | 17Feb2027 | - | - | - |
| 3 | 02Jan2007 | 17Feb2017 | 17Feb2027 | - | - | - |
| | | | Hydro Test | | | |
| Tank Id | Safety Valves | 6 | Previous | Last | Next | |
| 1 | - | | - | - | - | |
| 2 | - | | - | - | - | |
| 3 | - | | - | - | - | |

---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 | B-II |

END



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10070 Official #: 1192495

Shipyard: Tres Palacios Hull #: 101

| | - | | | | | | | | | | | | | | IN Page and | | - |
|---|----------|-------------|-------|-----------------|----------------------|---------------------|-------|----------|---------------|------|---------|-------------------|------------------------|---|---|-------------|--------------|
| 46 CFR 151 Tank Tank Group Information | - 11 L L | dentificati | - | tics | | | Tanks | 918 - J. | Carg | | Enviror | | Fire | Special Require | ments | - | |
| Trik Grp Tanks in Group | Density | Press. | Тетр. | Hull Typ | Cargo Seg Tenk | | Vent | Gauge | Pipe Class | Cont | Tanks | Handling Space | Protection Provided | General | Materials of Construction | Elec Haz | Temp Cont |
| A #1, #2, #3 | 13.6 | Atmos. | Amb. | := ⁰ | 18 28 | Integral Gravity | PV | Closed | 11 | G-1 | NR | NA | Portable | .50-60, .50-70(a) .50-70(b), .50-73 .50-81(a), .50- 81(b), | 55-1(b), (c), (e), (f), (j), 56-1(a), (b), (c), (d), (e), (f), (g), | 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 tanding 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 vassel has no electrical equipment located in a hazardous location.

List of Authorized Cargoes

| Cargo Identificatio | n | | | | | Conditions of Carriage | | | | | | | |
|---|------|-----------------|---------|-------|-------|------------------------|-------------------|----------|---------------------------------|----------------|--|--|--|
| | Chem | Compat | Sub | | Hull | Tank | Vapor Re App'd | | Special Regularments in 46 CFR | Inco | | | |
| Name | Code | Group No | Chapter | Grade | Тура | Group | | Calegory | 151 General and Matts of | insp Period | | | |
| Authorized Subchapter O Cargoes | | 8 A | 1.903 | 9 | 12. | | | | | 0.0835 | | | |
| Acetonitrile | ATN | 37 | 0 | С | 111 | A | Yes | 3 | No | G | | | |
| Acrylonitrile | ACN | 15 2 | 0 | С | 11 | A | Yes | 4 | .50-70(a), .55-1(a) | G | | | |
| Adiponitrile | ADN | 37 | 0 | E | Ш | A | Yes | 1 | No | 0 | | | |
| Alkyl(C7-C9) nitrates | AKN | 34 ² | 0 | NA | 111 | A | No | N/A | -50-81, -50-86 | G | | | |
| Aminoethylethanolamine | AEE | 8 | 0 | E | - 111 | A | Yes | 1 | .55-1(b) | 0 | | | |
| Ammonium bisulfite solution (70% or less) | ABX | 43 2 | 0 | NA | 10 | A | No | N/A | .50-73, .56-1(a), (b), (c) | G | | | |
| Ammonium hydroxide (28% or less NH3) | AMH | 6 | 0 | NA | 111 | A | No | N/A | .58-1(a), (b), (c), (f), (g) | G | | | |
| Anthracene oil (Coal tar fraction) | AHO | 33 | 0 | NA | 11 | A | No | N/A | No | G | | | |
| Benzene | BNZ | 32 | 0 | С | U | A | Yes | 1 | .50-60 | G | | | |
| Benzene or hydrocarbon mixtures (having 10% Benzene or more) | 6H8 | 32 2 | 0 | С | 10 | A | Yes | 1 | 50-60 | 0 | | | |
| Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more) | BHA | 32 2 | 0 | ¢ | 111 | A | Yes | 1 | .50-80, .58-1(b), (d), (f), (g) | G | | | |
| Benzene, Toluene, Xylene mixtures (10% Benzene or more) | BTX | 32 | O | B/C | 10 | A | Yes | 1 | .\$0-60 | G | | | |
| Butyl acrylate (all isomers) | BAR | 14 | 0 | D | 10 | A | Yes | 2 | 50-70(a), 50-81(a), (b) | G | | | |
| Butyl methacrylate | BMH | 14 | 0 | D | - 10 | A | Yes | 2 | .50-70(e), .50-81(e), (b) | G | | | |
| Butyraldehyde (all isomers) | BAE | 19 | 0 | С | - (1) | A | Yes | 1 | .55-1(h) | 0 | | | |
| Camphor oil (light) | CPO | 18 | 0 | D | - (1 | A | No | N/A | No | G | | | |
| Carbon tetrachloride | CBT | 36 | 0 | NA | 14 | A | No | N/A | Na | G | | | |
| Caustic potash solution | CPS | 5 2 | 0 | NA | 111 | A | No | N/A | .50-73, .55-1() | G | | | |
| Caustic soda solution | CSS | 5 2 | 0 | NA | 11 | A | No | N/A | .50-73, .55-1(j) | 0 | | | |
| Chemical Oil (refined, containing phenolics) | COD | 21 | 0 | E | 11 | A | Na | N/A | .50-73 | G | | | |
| Chlorobenzene | CRB | 36 | 0 | D | 111 | A | Yes | 1 | No | G | | | |
| Chloroform | CRF | 36 | 0 | NA | 611 | A | Yes | 3 | Na | G | | | |
| Coal tar naphtha solvent | NCT | 33 | 0 | D | 111 | A | Yes | 1 | .50-73 | 6 | | | |
| Creosole | CCM | 212 | 0 | E | 111 | A | Yes | 1 | No | G | | | |
| Cresols (all isomers) | CRS | 21 | 0 | E | 11 | A | Yes | 1 | No | G | | | |
| Cresylate spent caustic | CSC | 5 | 0 | NA | - 10 | A | No | N/A | 50-73, 55-1(b) | 0 | | | |
| Cresylic acid tar | CRX | | 0 | Ε | 10 | A | Yes | 1 | .55-1(1) | G | | | |
| Crotonaldehyde | CTA | 19 ² | 0 | С | 11 | A | Yes | 4 | .55-1(h) | G | | | |
| Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein) | CHG | | 0 | С | \$IL | A | No | N/A | Na | G | | | |
| Cyclohexanone | ССН | 18 | 0 | D | III | A | Yes | 1 | .50-1(a), (b) | G | | | |
| Cyclohexanone, Cyclohexanol mixture | CYX | 18 2 | 0 | E | 81 | A | Yes | 1 | .56-1 (b) | G | | | |
| Cyclohexylamine | CHA | 7 | 0 | D | III | A | Yes | 1 | .56-1(a), (b), (c), (g) | G | | | |
| Cyclopentadiene, Styrene, Benzene mixture | CSB | 30 | 0 | D | Ш | A | Yes | 1 | 50-80, 56-1(b) | 6 | | | |
| iso-Decyl acrylate | IAI | 14 | 0 | E | 111 | A | Yes | 2 | 50-70(a) 50-81(a) (b) 55-1(c) | G | | | |

Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 10070

Shipyard: Tres Palacios Hull #: 101

| Official #: 1192495 | 0.001 | P | age 2 (| of 7 | | - de | 1 | del carriero | Hull #: 101 | 3 - 452 |
|--|--------------|--|----------------|-------|--------------|---------------|-------|-----------------|--|-----------------|
| Cargo Identification | ALC: | (s.)) | | | - | | (| Condit | tions of Carriage | |
| Name | Chem Code | Compal Group No | Sub Chapter | Grade | Hull Type | Tank Group | App'd | VCS Category | Special Requirements in 46 CFR 151 General and Matts of | Insp. Period |
| Dichlorobenzene (all Isomers) | DBX | 36 | 0 | E | (1) | A | Yes | 3 | 56-1(a), (b) | G |
| ,1-Dichloroethane | DCH | 36 | Ó | С | 111 | A | Yes | 1 | Ng | G |
| 2-Dichloroethyl ether | DEE | 41 | 0 | Ð | 11 | A | Yes | 1 | 55-1(f) | G |
| Dichloromethane | DCM | 36 | 0 | NA | lit | A | Yes | 5 | Na | G |
| .4-Dichlorophenoxyacetic acid, diethanolamine salt solution | DDE | 43 | 0 | E | 111 | A | No | N/A | 56-1(4), (b), (c), (g) | G |
| .4-Dichlorophenoxyacetic acid, dimethylamine salt solution | DAD | 0 1.2 | 0 | A | 111 | A | No | N/A | 58-1(a), (b), (c), (g) | G |
| .4-Dichlorophenoxyacetic acid, trilsopropanolamine salt solution | DTI | 43 2 | 0 | E | 111 | A | No | N/A | .56-1(a), (b), (c), (g) | G |
| .1-Dichloropropane | DPB | 36 | 0 | C | 111 | A | Yes | 3 | No | G |
| ,2-Dichloropropane | DPP | 36 | 0 | C | 111 | A | Yes | 3 - | No | G |
| .3-Dichloropropane | DPC | 36 | 0 | c | 111 | A | Yes | - | No | G |
| ,3-Dichloropropens | DPU | =15 | 0 | 0 | =1 | A | Yes | 4 | No | 6 |
| | DMX | 15 | 0 | c | 11 | A | Yes | | No | 6 |
| Nethonopropene. Dichloropropane mixtures | DEA | 8 | 0 | E | - 11 | A | Yes | | .55-1(c) | 6 |
| Nethanolamine | DEN | the state of the s | | | | | | | .55-1(c) | G |
| Nethylamine | | 7 2 | 0 | E | 111 | A | Yes | _ | | G |
| Diethylenetriamine | DET | | | | 111 | <u>A</u> | Yes | 1 | | G |
| Disobutylamine | OBU | 7 | 0 | 0 | | <u>A</u> | Yes | 3 | .55-1(c) | |
| Xisopropanolamine | DIP | 8 | 0 | E | 111 | <u>A</u> | Yes | | .55-1(c) | G |
| llsopropylamine | DIA | 7 | 0 | C | 11 | A | Yes | | 55-1(c) | G |
| I,N-Dimethylacetamide | DAC | 10 | 0 | E | 11 | <u> </u> | Yes | | 56-1(s) | 6 |
| Amethylethanolamine | DMB | 8 | 0 | D | 111 | A | Yes | 1 | .56-1(b). (c) | 6 |
| limethylformamide | DMF | 10 | 0 | D | 11 | A | Yes | | .55-1(e) | C |
| X-n-propylamine | DNA | 7 | 0 | C | 11 | A | Yes | 3 | 55-1(c) | G |
| odecyldimethylamine, Tetradecyldimethylamine mixture | DOT | 7 | 0 | E | tII | A | No | N/A | .58-1(b) | G |
| Podecyl diphenyl ether disulfonate solution | DOS | 43 | 0 | # | 11 | A | No | N/A | No | _C _ |
| E Glycol Ether Mixture | EEG | 40 | 0 | D | 10 | Α | Na | N/A | No 51 Cent | a |
| thanotamine | MEA | 8 | 0 | E | 111 | A | Yes | 1 | .55-1(c) | 0 |
| ithyl acrylate | EAC | 14 | 0 | C | 111 | A | Yes | 2 | 50-70(e), 50-81(e), (b) | G |
| thylamine solution (72% or less) | EAN | 7 | 0 | A | l1 | A | Yes | 6 | .\$5-1(b) | G |
| I-Ethylbutytamine | EBA | 7 | 0 | D | ti I | A | Yes | 3 | .55-1(b) | G |
| I-Ethylcyclohexylamine | ECC | 7 | 0 | D | 111 | A | Yes | 1 | 55-1(b) | G |
| Ethylene cyanohydrin | ETC | 20 | 0 | E | 115 | A | Yes | 1 | Na | G |
| bylenediamine | EDA | 7 2 | 0 | 0 | 111 | A | Yes | 1 | .\$5-1(c) | G |
| thylene dichloride | EDC | 36 ² | 0 | C | 10 | A | Yes | | Na | G |
| Ethylene glycol haxyl ether | EGH | | 0 | E | 111 | A | No | N/A | No | G |
| thylene glycol monoaikyl ethers | EGC | | 0 | D/E | 111 | A | Yes | | Na | G |
| Ethylene glycol propyl ether | EGP | | 0 | E | 111 | A | Yes | | No | G |
| P-Ethylhexyl acrylate | EAI | 14 | 0 | E | 111 | A | Yes | | .50-70(a), .50-81(a), (b) | G |
| Ethyl methacrylate | ETM | 14 | 0 | D/E | 11 | A | Yes | | .50-70(e) | 6 |
| | | | | | | | _ | | Ne | 6 |
| l-Ethyl-3-propylacrolein | EPA | 19 2 | | E | 111 | <u>A</u> | Yes | | 55-1(h) | 6 |
| omaldehyde solution (37% to 50%) | FMS | | 0 | D/E | 111 | <u>A</u> | Yes | | | |
| บที่มาสโ | FFA | 19 | 0 | D | 111 | A | Yes | | 55-1(h) | 0 |
| Slutaraldehyde solution (50% or less) | GTA | | 0 | NA | 111 | <u>A</u> | No | N/A | | 0 |
| lexamethylenedlamine solution | HMC | | 0 | E | (11 | A | Yes | | 55-1(c) | đ |
| laxamethyleneimine | HMI | 7 | 0 | С | | A | Yes | | 56-1(b), (c) | G |
| lydrocarbon 5-9 | HFN | | 0 | С | 111 | Α | Yes | 1 | 30-70(a), 50-81(a), (b) | G |
| soprene | IPR | 30 | 0 | Α | - (11 | A | Yes | 7 | 50-70(s) 50-81(s) (b) | G |
| soprene, Pentadiene mixture | IPN | | 0 | в | 111 | A | No | N/A | | G |
| Kraft pulping liquors (free alkali content 3% or more)(including: Black, | KPL | े 5 | 0 | NA | 61 | A | No | N/A | 50-73 .56-1(4), (c), (g) | G |
| | | | | | | | | | | |
| neen, or White liquor) viesityl oxide | MSC | 18 2 | 0 | D | 111 | A | Yes | ; 1 | Na | G |



Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 10070 Official #: 1192495

Page 3 of 7

Shipyard: Tres Palacios Hull #: 101

| Cargo Identification | 1.0 | | 1 | | 20 | 22114 | | | tions of Carriage | |
|---|------|-----------------|--|-------|-------|---------------|-------------------|----------|--|--------|
| | Chem | Compat | Sub | | Hull | Tank | -Vapor R App'd | VCS | Special Requirements in 46 CFR | |
| Name | Code | Group No | | Grade | Тура | Group | | Category | 151 General and Mai's of | Period |
| Methylcyclopentadiene dimer | MCK | 30 | 0 | C | 5 m- | ···· = A ···· | Yes | | No block der start and an and an and | G |
| Methyl diethanolamine | MDE | 8 | 0 | Е | (1) | A | Yes | 1 | 56-1(b), (c) | G |
| 2-Methyl-5-ethylpyridine | MEP | 9 | 0 | Е - | 111 | A | Yes | 1 | 55-1(=) | G |
| Methyl methacrylate | MMM | 1 14 | 0 | С | 10 | A | Yes | 2 | 50-70(a), .50-81(a), (b) | G |
| 2-Methylpyridine | MPR | 9 | 0 | D | 扣 | A | Ýes | 3 | 55-1(c) | ٥ |
| alpha-Methylstyrone | MSR | 30 | 0 | D | 111 | A | Yes | 2 | 50-70(a)50-81(a), (b) | 0 |
| Marpholine | MPL | 7 2 | 0 | D | 111 | A | Yes | 1 | 55-1(c) | G |
| 1- or 2-Nitropropane | NPM | 42 | 0 | D | - (1) | A | Yes | 1 | 50-81 | G |
| 1,3-Penladiene | PDE | 30 | 0 | A | 10 | A | Yes | 7 | 50-70(4). 50-81 | G |
| Perchloroethylene | PER | 36 | 0 | NA | 111 | A | No | N/A | No | G |
| Polyethylene polyamines | PEB | 72 | 0 | E | 111 | A | Yas | 1 | 55-1(e) | G |
| Iso-Propanolamine | MPA | 8 | 0 | E | 111 | A | Yes | 1 | .55-1(c) | G |
| Propanolamine (Iso-, n-) | PAX | 8 | 0 | E | 111 | A | Yes | 1 | 56-1(b), (c) | G |
| Iso-Propylamine | IPP | 7 | 0 | A | 11 | A | Yes | 5 | .55-1(c) | G |
| Pyridine | PRD | 9 | 0 | C | 111 | A | Yes | 1 | .55-1(o) | G |
| Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide) | SAP | | 0 | | 111 | A | No | N/A | 50-73, 55-1(j) | G |
| Sodium aluminate solution (45% or less) | SAU | 5 | 0 | NA | 10 | A | No | N/A | 50-73, 56-1(a), (b), (c) | G |
| Sodium chlorate solution (50% or less) | SOD | 0 1.2 | CONTRACTOR OF STREET, STRE | NA | 111 | A | No | N/A | .50-73 | G |
| Sodium hypochlorite solution (20% or less) | SHQ | 5 | ō | NA | - 11 | A | No | N/A | 50-73, 58-1(a), (b) | G |
| Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less) | SSH | 0 1,2 | | NA | 111 | A | Yes | 1 | .50-73, 55-1(b) | G |
| Sodium sullide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm) | SSI | 0 1.3 | - | NA | tH | A | No | N/A | 50-73, 55-1(0) | G |
| Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm) | SSJ | 0 5 | 2 0 | NA | 11 | A | No | N/A | 50-73, 55-1(b) | C |
| Styrene (crude) | STX | | 0 | D | III | A | Yes | 2 | No | G |
| Slyrene monomer | STY | 30 | 0 | Ð | 11 | A | Yes | 2 | 50-70(s), 50-81(s), (b) | G |
| 1,1,2,2-Tetrachloroethane | TEC | 36 | 0 | NA | 10 | A | No | N/A | Na | 0 |
| Tetraethylenepentamine | ΠP | 7 | 0 | E | 10 | A | Yes | 1 | .55-1(c) | a |
| Tetrahydrofuran | THE | 41 | 0 | С | 111 | A | Yes | 1 | .50-70(b) | G |
| Toluenediamine | TDA | 9 | 0 | ε | 11 | A | No | N/A | .50-73, 58-1(a), (b), (c), (g) | G |
| 1,2,4-Trichlorgbenzene | TCB | 36 | 0 | E | 111 | A | Yes | 1 | No | G |
| 1,1,2-Trichlorgethane | TCM | 36 | 0 | NA | 01 | A | Yes | 1 | = 50-73, 56-1(s) | G |
| Trichloroethylene | TCL | 36 2 | 0 | NA | 111 | A | Yes | 1 | No | G |
| 1,2,3-Trichloropropane | TCN | 36 | 0 | E | ţi | A | Yes | 3 | .50-73, .58-1(a) | G |
| Triethanolamine | TEA | 8 2 | 0 | E | 10 | A | Yes | 1 | .35-1(b) | G |
| Triethylamine | TEN | 7 | 0 | С | 11 | A | Yes | 3 | .55-1(e) | G |
| Triethylenetetramine | TET | 7 2 | 0 | E | 111 | A | Yes | 1 | .55-1(b) | G |
| Triphenylborane (10% or lass), caustic soda solution | TPB | 5 | 0 | NA | NI. | A | No | N/A | .56-1(a), (b), (c) | G |
| Trisodium phosphate solution | TSP | | 0 | NA | 111 | A | No | N/A | | Q |
| Ures, Ammonium nitrate solution (containing more than 2% NH3) | UAS | 6 | 0 | NA | 10 | A | No | N/A | | G |
| Vanillin black liquor (free alkali content, 3% or more). | VBL | 5 | 0 | NA | 111 | A | No | N/A | | G |
| Vinyl acetate | VAM | | ō | C | 111 | A | Yes | 2 | .50-70(s), 50-81(s), (b) | G |
| Vinyl neodecanate | VND | 13 | 0 | Ē | | A | No | ~ N/A | | G |
| Vinyitoluane | VNT | 13 | 0 | D | 111 | A | Yes | 2 | .50-70(a), 50-81, 56-1(a), (b), (c), (| G |
| Subchapter D Cargoes Authorized for Vapor Contr | ol | | | | | | | | | |
| Acetone | ACT | 18 ² | D | C | | Α | Yes | 1 | | |
| Acetophenona | ACP | 18 | 0 | E | | А | Yes | 1 | | |
| Alcohol(C12-C16) poly(1-6)ethoxylates | APU | 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 | Ð | | A | Yes | 1 | | |



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10070 Official #: 1192495

Page 4 of 7

Shipyard: Tres Palacios Hull #: 101

| Cargo Identification | | | the star plan is | | and chirds | Conditions of Carriage | | | | | |
|---|--------------|-----------------------|------------------|-------|-------------|------------------------|-------------------|-----------------|--|-----------------|--|
| | | 1 | | | | | Vapor I | Recovery | | | |
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Ниї Тура | Tank Group | App'd (Y or N) | VCS Category | Special Requirements in 46 CFR 151 General and Matts of | tnsp. Period | |
| Amyl alcohol (iso-, n-, sec-, primary) | AAI | 20 | D | D | | Α | Yes | 1 | and a second second | | |
| Benzyl alcohol | BAL | 21 | D | E | | Α | Yes | 1 | | - | |
| Brake fluid base mixtures (containing Poly(2-8)alkylane(C2-C3) glycols, Polyalkylane(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters) | BFX | 20 | D | Ę | _ | A | Yes | 1 | | | |
| Butyl acetate (all isomers) | BAX | 34 | D | D | | Α | Yes | 1 | | ΞT. | |
| Butyl alcohol (iso-) | IAL | 20 2 | D | D | | A | Yes | 1 | | -0000-0000 | |
| Butyl alcohol (n-) | BAN | | Ð | D | | Α | Yes | 1 | | | |
| Butyl alcohol (sec-) | BAS | | D | С | | А | Yes | 1 | | | |
| Butyl alcohol (tert-) | BAT | | D | С | 1.35 | A | Yes | 1 | | 6300 mar | |
| Butyl benzyl phthalate | BPH | 34 | D | E | | A | Yes | 1 | | | |
| Butyl toluene | BUE | 32 | D | D | | A | Yes | 1 | | | |
| Caprolactam solutions | CLS | 22 | D | E | | A | Yes | 1 | | | |
| Cyclohexane | CHX | 31 | D | С | | A | Yes | 1 | | | |
| Cyclohexanol | CHN | 20 | D | Е | | A | Yes | 1 | | | |
| 1.3-Cyclopentadiene dimer (molten) | CPD | 30 | D | D/E | | A | Yes | 2 | | 1.52 | |
| p-Cymene | CMP | 32 | D | D | | Α | Yes | 1 | | | |
| iso-Decaldehyde | IDA | 19 | P | E | | A | Yes | 1 | | 1.0 | |
| n-Decaldehydo | DAL | 19 | D | Е | | 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 | | | |
| ontho-Dibutyl phthalate | DPA | 34 | D | Ε | | 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 | | | |
| Disobutyl ketona | DIK | 18 | 0 | D | | A | Yes | 1 | | 1.4 | |
| Disopropylbenzene (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 | | A | Yes | 1 | · · · · · · · · · · · · · · · · · · · | | |
| Diphenyl | DIL | 32 | D | D/E | | - <u></u> | Yes | 1 | | 1.1 | |
| Diphenyl, Diphenyl ether mixtures | 000 | 33 | D | E | | A | Yes | 1 | · · · · · · · · · · · · · · · · · · · | | |
| Diphenyl ether | DPE | 41 | 0 | (E) | | A | Yes | 1 | ······ | | |
| Dipropylene glycol | DPG | 40 | 0 | E | | A | Yes | 1 | | | |
| Distillates: Flashed feed stocks | DFF | 33 | 0 | E | | - A | Yes | 1 | | | |
| Distillates: Stralght run | DSR | 33 | D | E | | A | Yes | 1 | | | |
| Dodecene (all Isomers) | DOZ | 30 | | | | A | Yes | 1 | | | |
| Dodecylbenzene, see Alkyl(C9+)benzenes | DDB | 30 | | E | | | Yes | 1 | | | |
| | EEA | 34 | D | D | | A | Yes | | | | |
| 2-Ethoxyethyl acetate Ethoxy triglycol (crude) | ETG | | D | E | | A | Yes | | | | |
| Ethyl acetate | ETA | | D | C | | A | Yes | | | | |
| | | | | | | | | | | | |
| Ethyl acetoacetale | EAA | 34 20 ² | D | E | | <u>A</u> | Yes | | | | |
| Ethyl alcohol | | | | c | | - <u>^</u> - | Yes | | | | |
| Ethylbenzene | ETB | 32 | 0 | | | <u>A</u> | Yes | | | | |
| Ethyl butanol | EBT | | 0 | D | | <u>A</u> | Yes | | | | |
| Ethyl tert-butyl ether | EBE | | D | С | | <u>A</u> | Yes | | | | |
| Ethyl butyrate | EBR | | D | 0 | - 201 | <u>A</u> | Yes | | | | |
| Ethyl cyclohexane | ECY | | 0 | 0 | | <u>A</u> | Yes | | | | |
| Ethylene glycol | EGL | 20 2 | Ð | ε | | <u>A</u> | Yes | 1 | | | |



Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 10070

Official #: 1192495

Page 5 of 7

Shipyard: Tres Palacios Hull #: 101

| Cargo Identificatio | | | | | 141 | Conditions of Carriage | | | | | |
|--|--------------|--------------------|----------------|-------|--------------|------------------------|------------------------------|-----------------------------|---|------------------|--|
| Name | Chem Code | Compat Group No | Sub Chapter | Grade | Hull Type | Tank Group | Vapor / App'd (Y or N) | Recovery VCS Category | Special Requirements in 45 CFR 151 General and MatTs of | Insp. Perior | |
| Ethylene glycol butyl ether acetate | EMA | 34 | D | E | | A | Yes | 1 | an interesting and provide and | for the last 1 - | |
| Ethylene glycol diacetate | EGY | 34 | D | E | | A | Yes | 1 *** | | | |
| Ethylene glycol phenyl ether | EPE | 40 | D | ε - | | A | Yes | 1 | | 1.175 | |
| Ethyl-3-ethoxypropionate | EEP | 34 | D | D d | | A | Yes | 1 | 7.7. B | 1.00 | |
| 2-Ethylhexanol | EHX | 20 | D | E | 1.1 | A | Yes | 1 | | 1.4 | |
| Ethyi 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 | de't ree and | | |
| 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 gallon) | GAT | 33 | D | С | | A | Yes | 1 | | 13 | |
| Gasolines: Avlation (containing not over 4.86 grams of lead per gallon) | GAV | 33 | D | с | 8 | A | Yes | 1 | | 1 | |
| Gasolines: Casinghead (Aatural) | GCS | 33 | D | A/C | | A | Yes | 1 | | 1.1.1 | |
| Gasolines: Polymer | GPL | 33 | D | A/C | | A | Yes | 1 | | 8.7 | |
| Sasolines: Straight run | GSR | 33 | D | A/C | | A | Yes | 1 | | - IV | |
| Slycerine | GCR | 20 2 | D | £ | | A | Yes | 1 | | | |
| leptane (all isomers), see Alkanes (C6-C9) (all isomers) | HMX | 31 | D | С | | A | Yes | 1 | the second se | | |
| leptanoic acid | HEP | 4 | D | E | | A | Yes | 1 | | | |
| leptanol (all isomera) | HTX | 20 | D | D/E | 253 | A | Yes | 1 | | | |
| ieplene (all isomers) | HPX | 30 | D | C | | A | Yes | 2 | | | |
| leptyl acetate | HPE | 34 | D | E | - | A | Yes | 1 | | 245 | |
| lexane (all isomers), see Alkanes (C6-C9) | HXS | 31 2 | D | B/C | | A | Yes | 1 | 4 | | |
| lexanoic acid | HXO | 4 | D | E | | A | Yes | 1 | A B ALLER ALLER | | |
| fexanol | HXN | 20 | D | D | | A | Yes | 1 | | 3/12 | |
| lexene (all isomers) | HEX | 30 | D | C | | A | Yes | 2 | | 5.2 | |
| texylene glycol | HXG | 20 | D | E | | A | Yes | 1 | | 122 | |
| sopharane | IPH | 18 ² | D | E | | A | Yes | 1 | | 1.2 | |
| let fuel: JP-4 | JPF | 33 | Ð | E | | A | Yes | 1 | | 1.04 | |
| let fuel: JP-5 (kerosene, heavy) | JPV | 33 | 0 | 0 | | A | Yes | 1 | 1. Sec. | 1.1.0 | |
| Kerosene | KRS | 33 | D | D | | A | Yes | - 1 | | 100 | |
| dethyl acetate | MIT | 34 | D | 0 | - | A | Yes | 1 | | | |
| Jethyl alcohol | MAL | 20 2 | D | c | _ | A | Yes | 1 | | 1 Alex | |
| Methylamyl acetate | MAC | 34 | D | D | | A | Yes | | | - | |
| Methylamyl alcohol | MAA | 20 | D | 0 | | A | Yes | - 1 | | | |
| Methyl amyl ketone | MAK | 18 | 0 | D | | A | Yes | 1 | | | |
| Vethyl tort-butyl ether | MBE | 41 2 | D | c | | Ā | Yes | 1 | | | |
| Vethyl butyl ketone | MBK | 18 | 0 | c | | A | Yes | 1 | | | |
| Methyl butyrate | MBU | 34 | 0 | C | | | | | | | |
| Vethyl ethyl ketone | MEK | 18 2 | D | C | | A | Yes | 1 | | | |
| /ethyl heptyl ketone | MHK | 18 | D | D | | A | Yes | 1 | | | |
| Aethyl isobutyl ketone | MIK | 18 2 | | | | A | Yes | 1 | | | |
| Aethyl naphthalene (molten) | MNA | | D | C | _ | A | Yes | 1 | | | |
| Alneral spirits | - | 32 | 0 | E | | _ A | Yes | 1 | | 19 | |
| | MNS | 33 | 0 | 0 | | A | Yes | 1 | | | |
| Ayrcene Jealithe House | MRE | 30 | D | D | | A | Yes | 1 | | - | |
| laphtha: Heavy | NAG | 33 | D | # | | A | Yes | 1 | | | |
| Naphtha: Petroleum | PTN | 33 | D | # | | A | Yes | 1 | | | |
| Naphtha: Solvent | NSV NSS | 33 | D D | D | | <u>A</u> | Yes | 1 | | | |

Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 10070 Official #: 1192495

Page 6 of 7

Shipyard: Tres Palacios Hull #: 101

| Cargo Identifica | ation | | | | | Conditions of Carriage | | | | | |
|---|-------|----------|---------|----------|------|------------------------|----------|-----------------|--|--------|--|
| | Chem | Compat | Sub | | Huli | Tank | App'd | Recovery VCS | Special Regulrements in 46 CFR | Insp | |
| Name | Code | Group No | Chapter | Grade | Туре | Group | (Y or N) | Category | 151 General and Mat's of | Parlod | |
| Naphtha: Varnish makers and painters (75%) | NVM | 33 | D | С , | | A | Yes | 1 | the second s | f | |
| Nonane (all isomers), see Alkanes (C6-C9) | NAX | 31 | D | Ð | | A | Yes | 1 | | = | |
| Nonene (all isomers) | NON | 30 | D | D | 1 | Α | Yes | 2 | | | |
| Nonyl alcohol (all isomers) | NNS | 20 2 | D | É | | Α | Yes | 1 | | | |
| Nonyi phenol | NNP | 21 | D | E | | A | Yes | 1 | | - | |
| Nonyl phenol poly(4+)ethoxylates | NPE | 40 | D | Е | | A | Yes | 1 | | | |
| Octane (all isomers), see Alkanes (C6-C9) | OAX | 31 | D | С | | A | Yes | 1 | | | |
| Octanolc acid (all isomers) | OAY | 4 | D | E | | A | Yes | 1 | | | |
| Octanol (all isomers) | OCX | 20 7 | D | E | | A | Yes | 1 | | | |
| Octene (all Isomers) | OTX | 30 | D | С | | 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, fuet No. 4 | OFR | 33 | D | D/E | 67 | A | Yes | 1 | | | |
| Oll, fuel: No. 5 | OFV | 33 | D | D/E | | A | Yes | 1 | | 61.5 | |
| Oil, fuet: No. 6 | OSX | 33 | D | E | | A | Yes | 1 | | | |
| Oil, misc: Crude | OiL | 33 | 0 | C/D | | A | Yes | 1 | | | |
| Oil, misc: Diesel | ODS | 33 | D | D/E | | A | Yes | 1 | | | |
| Oil, misc: Lubricating | OLB | 33 | D | E | | A | Yes | 1 | | | |
| Oll, misc: Residual | ORL | 33 | D | E | S | A | Yes | 1 | | | |
| Oil, misc: Turbine | OTB | 33 | D | E | | A | Yes | 1 | | | |
| Pentane (all isomers) | PTY | 31 | D | | | A | Yes | 5 | | | |
| Pentene (all isomers) | PTX | 30 | D | A | | A | Yes | 5 | | | |
| alpha-Pinene | PIO | 30 | D | D | | A | Yes | 1 | | | |
| beta-Pinene | PIP | 30 | D | D | | A | Yes | 1 | | | |
| Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether | PAG | 40 | 0 | E | | A | Yes | 1 | | | |
| Poly(2-6)alkylene glycol monoalky (C1-C6) ether acetate | PAF | 34 | D | E | | A | Yes | 1 | | | |
| Polybutane | PLB | 30 | D | E | | A | Yes | 1 | | | |
| Polypropylene glycol | PGC | 40 | D | E | | A | Yes | 1 | | | |
| iso-Propyl acetate | IAC | 34 | D | C | | A | Yes | 1 | | | |
| | PAT | 34 | D | c | | - Â | Yes | 1 | | | |
| n-Propyl acetate | | 20 2 | 0 | C | | A | Yes | 1 | | •····• | |
| iso-Propyl alcohol | | 20 2 | | | | | | | P | | |
| n-Propyl alcohol | PAL | | D | <u>C</u> | | <u>A</u> | Yes | 1 | | | |
| Propylbenzene (all isomers) | PBY | 32 | 0 | D | i | A | Yes | 1 | | | |
| iso-Propylcyclohexane | IPX | 31 | 0 | D | | <u>A</u> | Yes | 1 | | | |
| Propylena glycol | PPG | 20 2 | D | E | | A | Yes | 1 | | | |
| Propylene glycol methyl ether acetate | PGN | 34 | D | D | | <u>A</u> | Yes | 1 | | | |
| Propylene tetramer | PTT | 30 | D | D | | A | Yes | 1 | | 0 | |
| Sullolane | SFL | - 39 | D | Е | | A | Yes | 1 | | | |
| Tetraethylene glycol | ΠG | 40 | D | E | | A | Yes | 1 | | | |
| Tetrahydronaphthalene | THN | 32 | D | E | | <u>A</u> | Yes | 1 | · · · · · · · · · · · · · · · · · | | |
| Toluene | TOL | 32 | D | С | | A | Yes | 1 | | H | |
| Tricresyl phosphate (less than 1% of the ortho isomer) | TCP | 34 | D | E | | A | Yes | 1 | | | |
| Triethylbenzene | TEB | 32 | D | e | | A | Yes | 1 | | | |
| Triethylene giycol | TEG | 40 | D | E | | Α | Yes | 1 | | | |
| Triethyl phosphate | TPS | 34 | D | E | | A | Yes | 1 | | | |
| Trimethylbenzene (all isomers) | ŤRE | 32 | D | {D} | 14 | A | Yes | 1 | | | |
| Trixylenyl phosphate | TRP | 34 | D | E | | A | Yes | . 1 | | | |
| Undecene | UDC | 30 | D | D/E | | A | Yes | 1 | | | |
| 1-Undecyl alcohol | UND | 20 | D | E | 200 | A | Yes | 1 | | | |
| Xylenes (ortho-, meta-, para-) | XLX | 32 | D | D | | A | Yes | 1 | | | |



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. |
| Compatability 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. Cargoos must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 150 in conjunction with the assigned reactive group number. |
| Note 1 | Because of the very high reactivity or unusual conditions of cartiage 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 2053-0001. Telephone |
| Note 2 | See Appendix I to 45 CFR Part 150 - exceptions to the compatability chart. |
| Subchapter Subchapter D Subchapter O Note 3 | The subchapter in Title 45 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 Islad in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2. Those cargoes Islad in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2. |
| 11012 3 | Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges. |
| Grado | The cargo classification assigned to each flammable or combustible liquid. Grades inside of "{ }"Indicate a provisional assignment based upon interature sources which were not verified by manufactures data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ansure that the barge is authorized for carriage of that grade of carriage of the person interature sources which were that grade and an other sources which were a personal assignment based upon interature sources which were that grade and ansure that the barge is authorized for carriage of the personal actions of t |
| A, B, C D, E | Flammable Equid cargoes, as defined in 46 CFR 30-10-22. Combustible liquid cargoes, as defined in 46 CFR 30-10.15. |
| Note 4 | The flammability/combusibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. The Person-in-Charge shall venty the cargo grade based on Manufacturers data and ensure that the harde is anthorized for ended of the tended of the tended. |
| NA # | Those subchapter O cargoes which are not classified as a flammable or combustible figuid. No flammability/combustibility grade has been assigned yet, as the necessary flash pcint/vapor pressure data for such assignments are presently not available. |
| Ний Туре | |
| 1 | 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 pradude the uncontrolled release of the cargo. See 46 CFR 151.10-1(b)(1). Designed to carry products which require instancement preventive measures to pradude the uncontrolled release of the cargo. See 46 CFR 151.10-1(b)(1). |
| R. Mi | |
| NA | Designed to carry products of sufficient hazard to require a moderate degree of control. See 45 CFR 151.10-1(b)(4). Not applicable to barges certificated under Subchapter D. |
| Conditions of Carriage | |
| Tank Group Vapor Recovery | The vessel's tank group (as defined in Section 4) which is authorized for carriage of the named cargo. |
| 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 lank 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 vances of the specified owner |
| | 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 156.120, 30 CFR 155.170, 46 CFR 35.05 and 46 CFR 39.30. The cargo tank venting system calculations (46 CFR 39.20-11) and the pressure drop calculations (46 CFR 39.20-11) 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 | () signly toxic) VCSs for these toxic cargoes cannot use a spill valve or rupture disk as the primary means to meet the overful protection requirement of 46 CFR 39.20-9. This requirement is in addition to the requirements of Category 1. |
| Calegory 4 | (Polymerizes and highly toxic) Must comply with requirements of Categories 1, 2 and 3. |
| Calegory 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 Calegory 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 loxic) 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. |
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