

27 Sep 2021 Certification Date: 27 Sep 2022 Expiration Date:

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. Call Sign IMO Number

Official Number

Vessel Name	Official Number	^	100.25 to 100.00			Tank B	arge
KIRBY 10502	CG03401	U					
Hailing Port	Hull M	!aterial	Horsep	ower	Propulsion		
	Ste	el			Unknown		
Place Built	Delivery I	Date	Keel Laid Date	Gross Tons	Net Tons	TWD	Length R-200.0
CARUTHERSVILLE, MO	19De	c1991	15Nov1991	R-705	R-705 I-		1-0
UNITED STATES							
Owner KIRBY INLAND MARINE, L 55 WAUGH DRIVESUITE HOUSTON, TX 77007 UNITED STATES	.P 1000		1835 CHA	BY INLAND 50 MARKET	V, TX 77530		
This vessel must be manne 0 Certified Lifeboatmen, 0 0	d with the following li Certified Tankermen,	censed 0 HSC	and unlicense Type Rating,	ed Personne and 0 GMD	el. Included in wooss Operators.	hich there	must be
0 Masters	0 Licensed Mates		f Engineers		Dilers		
0 Chief Mates	0 First Class Pilots		Assistant Engine				
0 Second Mates	0 Radio Officers		ond Assistant Eng				
0 Third Mates	0 Able Seamen		d Assistant Engine	eers			ř
0 Master First Class Pilot	0 Ordinary Seamen		nsed Engineers				
0 Mate First Class Pilots	0 Deckhands		lified Member Eng		one in addition	to crew an	d no Others Total
In addition, this vessel may Persons allowed: 0	carry 0 Passengers,	, 0 Otne	er Persons in c	rew, o Pers	ons in addition	to crew, arr	a no otners. Total
Route Permitted And Co	onditions Of Operat	ion:					
Lakes, Bays, and	Sounds plus L	.imite	d Coastwi	se			
Also, in fair weather of Florida.	only, not more than	twelv	ve (12) miles	from shor	e between St.	Marks and	Carrabelle,
This vessel has been gr vessel is operated in s salt water intervals pe change in status occurs	salt water more that er 46 CFR 31.10-21 s.	an 6 mo (a)(1)	and the cogn	izant OCMI	notified in	writing as	soon as this
This tank barge is part ***SEE NEXT PAGE FO						treamlined	Inspection Progr
With this Inspection for Ce Inspection, Marine Safety	ertification having bee	en com	pleted at Port A e vessel, in all r	Arthur, TX, I	UNITED STATE	ES, the Offi th the appli	cer in Charge, Marir cable vessel inspect
laws and the rules and rec	quiations prescribed to Periodic/Re-Inspection	<u>nereun</u> n	der.	This certific	ate issued by:	MH	01200
Date Zone	A/P/R	Signa	ture		K. A. Hantal, CD	/ X 1 / i '	By direction
				Officer in Charge	Marine Inspection Marine Safe	ety Unit Por	t Arthur
				Inspection Zone	Manine Odie	Ly Other Of	C Z ALL IGH
Dept. Of Home Sec., USCG - CG-854 (F	Rev. 06-04)						OMB Approved No. 1625-00



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Vessel Name: KIRBY 10502

(TBSIP). Inspection activities aboard this barge shall be conducted per 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

28Feb2031

27Sep2021

23Feb2011

Internal Structure

30Apr2026

27Sep2021

08Apr2016

---Stability---

Type

Issued Date

Office

Book

None Valid

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

Authorization:

FLAMMABLE/COMBUSTIBLE AND SPECIFIED HAZARDOUS CARGOES

Total Capacity

Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

10853

Barrels

Yes

No

No

Hazardous Bulk Solids Authority

Loading Constraints - Structural

Tank Location Description	Max Cargo Weight per Tank (short tons)	Maximum Density (lbs/gai)
1	499	13.600
2	518	13.600
3	566	13.600

Loading Constraints - Stability

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
I	1347	8ft 6in	13.6	R, LBS, LC 0-12
II	1400	8ft 9in	13.6	R, LBS, LC 0-12
II	1507	9ft 3in	12.4	R, LBS, LC 0-12
111	1400	8ft 9in	13.6	R, LBS, LC 0-12
111	1507	9ft 5in	12.7	R, LBS, LC 0-12

^{*}Conditions Of Carriage*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial # C1-1300516, dated 26APR13, 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 vessel is responsible for ensuring the compatibility requirements of 46 CFR 150 are met. Cargoes must be checked for compatibility using figures, tables, and appendices of 46 CFR 150 in conjunction with the reactive group number from the "Compat Group No" column is listed in the vessel's CAA.

When the vessel is carrying cargoes containing 0.5% or greater benzene by volume, the person in charge is responsible for ensuring the provisions of 46 CFR Part 197, subpart C are applied.

^{*}Nitrogen Inert Gas System for Diphenylmethane Diisocyanate cargo*



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Per 46 CFR Part 151.50-70, this vessel cargo must be inhibited or stabilized. The vapor inerted nitrogen system has been inspected to the plans approved by the Marine Safety Center letter serial ##E1-1301350, dated 26 Apr 2013, and found acceptable for the stabilization of this bulk liquid cargo. This nitrogen apparatus installation shall remain permanently affixed to the vessel and maintained 46 CFR Part 54, and available for subsequent inspections.

Vapor Control Authorization

Per 46 CFR, Part 39, excluding Part 39.4000, this vessel's vapor control system has been inspected to the plans approved by Marine Safety Center letter serial # M-10829, dated 20Nov91, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

Stability and Trim

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

The maximum design density of cargo which may be filled to the tank top is 8.7 lbs/gal. Cargoes with higher densities, up to13.5 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

--- Inspection Status ---

Cargo Tanks

*Cargo Tanks						
	Internal Exam	1		External Exa		111
Tank Id	Previous	Last	Next	Previous	Last	Next
1	27Jan2015	27Sep2021	30Sep2031	e	-	₩.
2	27Jan2015	27Sep2021	30Sep2031	<u>~</u> :	#.·	-
3	27Jan2015	27Sep2021	30Sep2031	-	S	-
			Hydro Test			
Tank Id	Safety Valve	es	Previous	Last	Next	
1	£		*	-		
2	-		18	-	Ě	
3			*	- 0	3)	

---Lifesaving Equipment---

Total Equipment for 0 Persons

Total Equipment for 0 Persons				
3.00 3.00	Quantity	Capacity		Required
Primary Lifesaving Equipment	Quartity	145	Life Decembers (Adult)	0
Lifeboats (Total)	0	0	Life Preservers (Adult)	
Lifeboats (Port)	0	0	Life Preservers (Child)	0
Lifeboats (Starboard)	0	0	Ring Buoys (Total)	0
	0	0	With Lights	0
Motor Lifeboats	0	0	With Line Attached	0
Lifeboats With Radio	O			0
Rescue Boats/Platforms	0	0	Other	U
Inflatable Rafts	0	0	Immersion Suits	0
	0	0	Portable Lifeboat Radios	0
Life Floats/Buoyant App		0	Equipped With EPIRB?	NO
Inflatable Buoyant Apparatus (IBA)	0	0	Equipped With Er into:	

---Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

--- Fire Fighting Equipment ---



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Fire Extinguishers - Hand portable and semi-portable

Quantity

Class Type

2

B-II

END



Department of Homeland Security

Serial #:

C1-1300516

26-Apr-13



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10502

Official #: CG034010

Shipyard: ST. LOUIS

Hull #: 5544

46	CFR 151 Tank G	roup (Chara	cterist	ics		÷I ·											
Tan	k Group Information	Cargo I	Cargo Identification Tanks			Carg Tran		Environmental Control		Fire	Special Requirements							
Tnk Grp	Tanks in Group	Density	Press.	Temp.		Seg	Туре	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Temp Cont
A #	‡ 1-3	13.6	Atmos.	Elev	1	1ii 2ii	Integral Gravity	PV	Closed	1	G-1	Dry N2	Vent F	Portable	40-1(f)(1), .50-5, .50-60, .50-70(a), .50-70(b), .50-73,	55-1(b), (c), (e), (f), (g), (h), (j), 56-1(a), (b), (c), (d), (e), (f), (g), 58-1(a), (e),	NR	Yes

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 Identificatio	n					Conditions of Carriage					
							Vapor Re	ecovery			
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period	
Authorized Subchapter O Cargoes								-63			
Acetic acid	AAC	4 2	0	D	. 111	Α	Yes	1	.50-73, .55-1(g)	G	
Acetic anhydride	ACA	11	0	D	Ш	Α	Yes	1	.50-73, .55-1(g)	G	
Acetone cyanohydrin	ACY	0 1,2	0	E	1	Α	Yes	3	.50-5, .50-70(b), .50-73, .50-81	G	
Acetonitrile	ATN	37	0	С	Ш	Α	Yes	3	No	G	
Acrylic acid	ACR	4 2	0 .	D	Ш	Α	Yes	2	.50-70(a), .50-73, .50-81, .58-1(a)	G	
Acrylonitrile	ACN	15 ²	0	С	11	Α	Yes	4	.50-70(a), .55-1(e)	G	
Adiponitrile	ADN	37	0	E	11	Α	Yes	1	No	G	
Alkylbenzenesulfonic acid (greater than 4%)	ABS	0 1,2	0	Ε	* 111	Α	No	N/A	.50-73, .58-1(e)	G	
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	111	Α	No	N/A	.50-81, .50-86	G	
Allyl alcohol	ALA	15 ²	0	С	l	Α	Yes	3	.50-5, .50-73	G	
Allyl chloride	ALC	15	0	В	1	Α	Yes	3	.50-5	G .	
Aluminum sulfate solution	ASX	43 2	0	NA	Ш	Α	No	N/A	.58-1(e)	G	
Aminoethylethanolamine	AEE	8	0	Е	Ш	Α	Yes	1	.55-1(b)	G	
Ammonium bisulfite solution (70% or less)	ABX	43 2	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (b), (c)	G	
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	Ш	Α	No	N/A	.56-1(a), (b), (c), (f), (g)	G	
Aniline	ANL	9	0	Е	1	Α	Yes	3	.50-5, .50-73	G	
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	11	Α	No	N/A	No	G	
Benzene	BNZ	32	0	С	111	. A	Yes	1	.50-60	G	
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 ²	0	С	111	Α	Yes	1	.50-60	G	
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 ²	0	С	111	Α	Yes	1	.50-60, .56-1(b), (d), (f), (g)	G	
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	0	B/C	111	Α	Yes	1	.50-60	G	
Butyl acrylate (all isomers)	BAR	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Butyl methacrylate	BMH	1 14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Butyraldehyde (all isomers)	BAE	19	0	С	111	Α	Yes	1	.55-1(h)	G	
Camphor oil (light)	CPC	18	0	D	11	Α	No	N/A	No No	G	
Carbolic oil	CBC	21	0	E	ı	Α	Yes	3	.50-5, .50-73	G	
Carbon tetrachloride	CBT	36	0	NA	111	Α	No	N/A	Ų No	G	
Caustic potash solution	CPS	5 ²	0	NA	111	Α	No	N/A	.50-73, .55-1(j)	G	
Caustic soda solution	CSS	5 ²	0	NA	III	Α	No	N/A	.50-73, .55-1(j)	G	
Chemical Oil (refined, containing phenolics)	COL	21	0	Е	11	Α	No	N/A	,50-73	G	
Chlorobenzene	CRE	3 36	0	D	111	Α	Yes	s 1	No	G	
Chloroform	CRF	36	0	NA	Ш	Α	Yes	3	No	G	
Chlorohydrins (crude)	CHE) 17	0	D	I	Α	Yes	3	.50-5	G	



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: **KIRBY 10502**Official #: CG034010

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Shipyard: ST. LOUIS

Dated:

26-Apr-13

Cargo Identification	n				2	Conditions of Carriage						
	T	I					Vapor R	ecovery				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
o-Chloronitrobenzene	CNO	42	0	E	ı	Α	No	N/A	.50-5, .50-73	G		
Coal tar crude bases	СТВ	9	0	D	- 1	Α	No	N/A	.50-5, .50-73, .55-1(e)	G		
Coal tar naphtha solvent	NCT	33	0	D	Ш	Α	Yes	1	.50-73	G		
Coal tar pitch (molten)	CTP	33	0	E	Ш	Α	No	N/A	.50-73	G		
Creosote	CCM	21 2	0	E	Ш	Α	Yes	1	No	G		
Cresols (all isomers)	CRS	21	0	Ε	Ш	Α	Yes	1	No	G		
Cresylate spent caustic	CSC	5	0	NA	111	Α	No	N/A	.50-73, .55-1(b)	G		
Cresylic acid tar	CRX		0	Е	111	Α	Yes	1	.55-1(f)	G		
Crotonaldehyde	CTA	19 ²	0	С	11	Α	Yes	4	.55-1(h)	G		
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	Ш	Α	No	N/A	No	G		
Cyclohexanone	ССН	18	0	D	111	Α	Yes	1	.56-1(a), (b)	G		
Cyclohexanone, Cyclohexanol mixture	CYX	18 ²	0	E	Ш	Α	Yes	1	.56-1 (b)	G		
Cyclohexylamine	CHA	7	0	D	Ш	Α	Yes	1	.56-1(a), (b), (c), (g)	G		
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	0	D	111	Α	Yes	1	.50-60, .56-1(b)	G		
iso-Decyl acrylate	IAI	. 14	0	E	111	Α	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	G		
Dichlorobenzene (all isomers)	DBX	36	0	E	Ш	Α	Yes	3	.56-1(a), (b)	G		
1,1-Dichloroethane	DCH	36	0	С	ÍΠ	Α	No	N/A	No	G		
2,2'-Dichloroethyl ether	DEE	41	0	D	П	Α	Yes	1	.55-1(f)	G		
Dichloromethane	DCM	36	0	NA	Ш	Α	No	N/A	No	G		
2.4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE		0	E	III	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
2.4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD		2 0	Α	Ш	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0	E	III	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
1,1-Dichloropropane	DPB	36	0	С	111	A	Yes	3	No	G		
1,2-Dichloropropane	DPP	36	0	C	III	Α	Yes	3	No	G		
	DPC		0	C	III	A	Yes		No	G		
1,3-Dichloropropage	DPU		0			A	Yes		No	G		
1,3-Dichloropropene	DMX		0	C	 II	A	Yes		No	G		
Dichloropropene, Dichloropropane mixtures	DCN		0	E	<u></u> -	A	No	 N/A	.50-73, .58-1(e)	G		
2,2-Dichloropropionic acid	DEA		0	E	111	A	Yes		.55-1(c)	G		
Diethanolamine Diethanolamine	DEN		0		<u></u>	A	Yes		.55-1(c)	G		
Diethylamine	DEN		0	E	111	A	Yes		.55-1(c)	G		
Diethylenetriamine	DBU		0	D	111	A	Yes		.55-1(c)	G		
Diisobutylamine	DIP	8	0	E	111	A	Yes		.55-1(c)	G		
Diisopropanolamine		7	0	C		A	Yes		.55-1(c)	G		
Diisopropylamine	DIA		0	E	III	A	Yes		.56-1(b)	G		
N,N-Dimethylacetamide	DAC								.56-1(b), (c)	G		
Dimethylethanolamine	DME		0	D		Α	Yes		.55-1(e)	G		
Dimethylformamide	DMF		0	D		Α	Yes		No	G		
1,4-Dioxane	DOX		0			A	Yes		.50-5, .56-1(a), (b)	G		
Diphenylmethane diisocyanate	DPN		0	E	- 11	A	Yes Yes		.55-1(c)	G		
Di-n-propylamine	DNA		0	С	11	A				G		
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DO1		0	E		A	No	N/A		G		
Dodecyl diphenyl ether disulfonate solution	DOS		0	#	11	A	No	N/A		G		
EE Glycol Ether Mixture	EEG		0	D		A	No	N/A	.50-5	G		
Epichlorohydrin	EPC		0	D	<u> </u>	A	Yes		.55-1(c)	G		
Ethanolamine	MEA		0	E		A	Yes		.50-70(a), .50-81(a), (b)	G		
Ethyl acrylate	EAC		0	С	111	A	Yes			G		
Ethylamine solution (72% or less)	EAN	7	0	Α	11	Α	Yes	6	.55-1(b)	G		



Serial #: C1-1300516

26-Apr-13

Certificate of Inspection

Cargo Authority Attachment

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Shipyard: ST. LOUIS

Cargo Identification			<			Conditions of Carriage					
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor R App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Perio	
N-Ethylbutylamine	EBA	7	0	D	III	Α	Yes	3	.55-1(b)	G	
N-Ethylcyclohexylamine	ECC	7	0	D	Ш	Α	Yes	1	.55-1(b)	G	
Ethylene chlorohydrin	ECH	20	0	D	1	Α	Yes	3	.50-5, .50-73	G	
Ethylene cyanohydrin	ETC	20	0	E	III	Α	Yes	1	No	G	
Ethylenediamine	EDA	7 2	0	D	III	Α	Yes	1	.55-1(c)	G	
Ethylene dichloride	EDC	36 ²	0	С	Ш	Α	Yes	1	No	G	
Ethylene glycol hexyl ether	EGH	40	0	E	III	Α	No	N/A	No	G	
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	Ш	Α	Yes	1	No	G	
Ethylene glycol propyl ether	EGP	40	0	Е	III	Α	Yes	1	No	G	
2-Ethylhexyl acrylate	EAI	14	0	E	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Ethyl methacrylate	ETM	14	0	D/E	Ш	Α	Yes	2	.50-70(a)	G	
	EPA	19 2	0	E	111	A	Yes	1	No	G	
2-Ethyl-3-propylacrolein	FMS	19 ²	0	D/E	111	A	Yes	1	.55-1(h)	G	
Formaldehyde solution (37% to 50%)	FFA	19	0	D	111	A	Yes	1	.55-1(h)	G	
Furfural Chataraldahyda adution (50% or loss)	GTA	19	0	NA .	111	A	No	N/A		G	
Glutaraldehyde solution (50% or less)	GAC		0	E	111	A	No	N/A		G	
Glyoxylic Acid Solution (50% or less)	HMC		0	E		A	Yes	1	.55-1(c)	G	
Hexamethylenediamine solution	HMI	7 -	0	C	 	A	Yes	1	.56-1(b), (c)	G	
Hexamethyleneimine	HFN	1-	0	С		A	Yes	1	.50-70(a), .50-81(a), (b)	G	
Hydrocarbon 5-9		0 1,		E		A	Yes	3	.50-5, .50-70(a), .50-73, .50-81(a), (G	
2-Hydroxyethyl acrylate	HAI		0	A	<u>'</u>	A	No	 N/A		G	
Isoprene	IPR	30	0	В	111	A	No	N/A		G	
Isoprene, Pentadiene mixture Kraft pulping liquors (free alkali content 3% or more)(including: Black	IPN KPL	5	0	NA	111	A	No	N/A		G	
Green, or White liquor)	MSC	18 2	0	D	111	Α	Yes	1	No	G	
Mesityl oxide	MAN		0	C	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Methyl acrylate	MCK		0	C	III	A	Yes	1	No	G	
Methylcyclopentadiene dimer	MDE		0	E	III	Α	Yes	1	.56-1(b), (c)	G	
Methyl diethanolamine	MEP		0	 E	- 111	Α	Yes		.55-1(e)	G	
2-Methyl-5-ethylpyridine	MMN		0		III	A	Yes		.50-70(a), .50-81(a), (b)	G	
Methyl methacrylate	MPR		0	D	111	A	Yes		.55-1(c)	G	
2-Methylpyridine	MSF		0	D		A	Yes		.50-70(a), .50-81(a), (b)	G	
alpha-Methylstyrene	MPL			D	111	A	Yes		.55-1(c)	G	
Morpholine	NTB	42	0	E	- 1	A	Yes		.50-5, .50-73	G	
Nitrobenzene			0	D	11	A	No	N/A	.50-81, .56-1(b)	G	
Nitroethane	NTE		0	D		A	Yes		.50-81	G	
1- or 2-Nitropropane	NPM			E	- 111		No	N/A		G	
o-Nitrotoluene	NIE	42	0		111	A				G	
1,3-Pentadiene	PDE		0	A	111	A	No	N/A	,	G	
Perchloroethylene	PER		0	NA F	111	A	No		No	G	
Phthalic anhydride (molten)	PAN		0	E	111	Α.	Yes		.55-1(e)	G	
Polyethylene polyamines	PEB			E	- 111	Α	Yes		.55-1(e)	G	
Polymethylene polyphenyl isocyanate	PPI	12		E	<u> </u>	A	Yes		.55-1(c)	G	
iso-Propanolamine	MPA		0	E	- 111	A	Yes		.56-1(b), (c)	G	
Propanolamine (iso-, n-)	PAX		0	E	- 111	Α	Yes		.50-73, .55-1(g)	G	
Propionic acid	PNA		0	D		A	Yes			G	
iso-Propylamine	IPP	7	0	A	- 11	Α.	No	N/A		G	
iso-Propyl ether	IPE	41	0	С	Ш		Yes		.50-70(a)	G	
Pyridine	PRE	9	0	С	111	Α	Yes	: 1	.55-1(e)	G	



Dated:

26-Apr-13

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10502 Official #: CG034010

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Shipyard: ST. LOUIS

Cargo Identification	1					Conditions of Carriage						
								Recovery				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide)	SAP		0		Ш	Α	No	N/A	.50-73, .55-1(j)	G		
Sodium aluminate solution (45% or less)	SAU	5	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (b), (c)	G		
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA	Ш	Α	No	N/A	.50-73	G		
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA	Ш	Α	No	N/A	.50-73, .56-1(a), (b)	G		
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)	SSH	0 1,2	0	NA	Ш	Α	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	0	NA	111	Α	No	N/A	.50-73, .55-1(b)	G		
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1,2	0	NA	Ш	Α	No	N/A	.50-73, .55-1(b)	G		
Sodium thiocyanate solution (56% or less)	STS	0 1,2	0	NA	Ш	Α	No	N/A	.58-1(a)	G		
Styrene (crude)	STX		0	D	Ш	Α	Yes	2	No	G		
Styrene monomer	STY	30	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	Ш	Α	No	N/A	No	G		
Tetraethylenepentamine	TTP	7	0	Ε	111	Α	Yes	1	.55-1(c)	G		
Tetrahydrofuran	THF	41	0	С	-111	Α	Yes	1	.50-70(b)	G		
Toluenediamine	TDA	9	0	Е	11	Α	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G		
Toluene diisocyanate	TDI	12	0	E	1	Α	Yes	2	.50-5, .55-1(e)	G		
o-Toluidine	TLI	9	0	E	- 11	Α	Yes	3	.50-5, .50-73	G		
1,2,4-Trichlorobenzene	ТСВ	36	0	Ε	111	Α	Yes	1	No	G		
1,1,2-Trichloroethane	TCM	36	0	NA	111	A	Yes	1	.50-73, .56-1(a)	G		
	TCL	36 ²	0	NA	Ш	Α	Yes	1	No	G		
Trichloroethylene	TCN	36	0	E	11	A	Yes	3	.50-73, .56-1(a)	G		
1,2,3-Trichloropropane Triethanolamine	TEA	8 ²	0	E	III	A	Yes	1	.55-1(b)	G		
	TEN	7	0	C	II	Ā	Yes	+	.55-1(e)	G		
Triethylamine	TET	7 2	0	E	111	A	Yes		.55-1(b)	G		
Triethylenetetramine	TPB	5	0	NA		A	No	N/A	.56-1(a), (b), (c)	G		
Triphenylborane (10% or less), caustic soda solution	TSP	5	0	NA	111	A	No	N/A		G		
Trisodium phosphate solution	UAS	6	0	NA	111	A	No	N/A		G		
Urea, Ammonium nitrate solution (containing more than 2% NH3)	VAK	19		D		A	Yes		No	G		
Valeraldehyde (all isomers)		5	0	NA.	111	A	No	' N/A	.50-73, .56-1(a), (c), (g)	G		
Vanillin black liquor (free alkali content, 3% or more).	VBL		0	C	111	A	Yes		.50-70(a), .50-81(a), (b)	G		
Vinyl acetate	VAM							N/A		G		
Vinyl neodecanate	VND	13	0	E	111	A	No Yes		.50-70(a), .50-81, .56-1(a), (b), (c), (G		
Vinyltoluene	VNT	13	0	D	111	A	res		(2) (2) (2) (2) (2) (2) (3)			
Subchapter D Cargoes Authorized for Vapor Contractions Acetone	OI ACT	18 ²	D	С		Α	Yes	1				
Acetophenone	ACP	18	D	E		Α	Yes	1				
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E		Α	Yes	1				
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	Е		Α	Yes	1				
Amyl acetate (all isomers)	AEC	34	D	D		Α	Yes	1				
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		Α	Yes	1		-		
Benzyl alcohol	BAL	21	D	E		Α	Yes	1				
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-Ç3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		Α	Yes	1	, i			
Butyl acetate (all isomers)	BAX	34	D	D		Α	Yes	1				
Butyl alcohol (iso-)	IAL	20 ²	D	D		Α	Yes	1				
Butyl alcohol (n-)	BAN	20 ²	D	D		Α	Yes	1				
Butyl alcohol (sec-)	BAS	20 ²	D	С		Α	Yes	1				
Butyl alcohol (tert-)	BAT		D	С		Α	Yes	1				



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Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10502
Official #: CG034010

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Shipyard: ST. LOUIS

Cargo Iden	tification		-			Conditions of Carriage						
							Vapor I	Recovery				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Perio		
Butyl benzyl phthalate	BPH	34	D	E		Α	Yes	1				
Butyl toluene	BUE	32	D	D		Α	Yes	11				
Caprolactam solutions	CLS	22	D	E		Α	Yes	1				
Cyclohexane	CHX	31	D	С		Α	Yes	1				
Cyclohexanol	CHN	20	D	E		Α	Yes	1				
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		Α	Yes	2				
p-Cymene	CMP	32	D	D		Α	Yes	1				
so-Decaldehyde	IDA	19	D	E		Α	Yes	1				
n-Decaldehyde	DAL	19	D	E		Α	Yes	1				
Decene	DCE	30	D	D		Α	Yes	1	e e			
Decyl alcohol (all isomers)	DAX	20 ²	D	E		Α	Yes	1				
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		Α	Yes	1	·			
Diacetone alcohol	DAA	20 ²	D	D		Α	Yes	1				
ortho-Dibutyl phthalate	DPA	34	D	Е		Α	Yes	1		*		
Diethylbenzene	DEB	32	D	D		Α	Yes	1				
Diethylene glycol	DEG	40 ²	D	E		Α	Yes	1				
Diisobutylene	DBL	30	D	С		Α	Yes	1				
Diisobutyl ketone	DIK	18	D	D		Α	Yes	1				
Diisopropylbenzene (all isomers)	DIX	32	D	E		Α	Yes	1				
Dimethyl phthalate	DTL	34		E		Α	Yes	1				
	DOP	34	D .	 E		A	Yes	1				
Dioctyl phthalate	DPN	30	D	 D		A	Yes	1				
Dipentene	DIL	32	D	D/E		A	Yes	1				
Diphenyl	DDO	33	D	E		A	Yes	1				
Diphenyl, Diphenyl ether mixtures	DPE	41	D	(E)		A	Yes	1				
Diphenyl ether	DPG	40	D	E		A	Yes	1				
Dipropylene glycol	DFG	33	D	E		A	Yes	1				
Distillates: Flashed feed stocks	DSR	33		E		A	Yes	<u>;</u>				
Distillates: Straight run				D		A	Yes	1				
Dodecene (all isomers)	DOZ	30	D				Yes	1				
2-Ethoxyethyl acetate	EEA	34	D	D		A		1				
Ethoxy triglycol (crude)	ETG	40	D	E		Α	Yes					
Ethyl acetate	ETA	34	D	С		A	Yes	1				
Ethyl acetoacetate	EAA	34	D	E		Α .	Yes	1				
Ethyl alcohol	EAL	20 ²	D	С		Α	Yes	1				
Ethylbenzene	ETB	32	D	С		Α	Yes	1				
Ethyl butanol	EBT	20	D	D		Α	Yes	1				
Ethyl tert-butyl ether	EBE	41	D	С		Α	Yes	1				
Ethyl butyrate	EBR	34	D	D		Α	Yes	1				
Ethyl cyclohexane	ECY	31	D	D		Α	Yes	1	****			
Ethylene glycol	EGL	20 2	D	Е		A	Yes	1				
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes					
Ethylene glycol diacetate	EGY	34	D	Е		Α	Yes					
Ethylene glycol phenyl ether	EPE	40	D	Е		. А	Yes	1				
Ethyl-3-ethoxypropionate	EEP	34	D	D		Α	Yes					
2-Ethylhexanol	EHX	20	D	Е		Α	Yes					
Ethyl propionate	EPR	34	D	С		Α	Yes	1				
Ethyl toluene	ETE	32	D	D		Α	Yes	1				
Formamide	FAM	10	D	E		Α	Yes	1				



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Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10502 Official #: CG034010

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Shipyard: ST. LOUIS

Cargo Identificatio	n					Conditions of Carriage					
								Recovery			
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period	
Furfuryl alcohol	FAL	20 ²	D	E		Α	Yes	1			
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		Α	Yes	1			
Gasoline blending stocks: Reformates	GRF	33	D	A/C		Α	Yes	1			
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	С		Α	Yes	1			
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	С		Α	Yes	1			
Gasolines: Casinghead (natural)	GCS	33	D	A/C		Α	Yes	1			
Gasolines: Polymer	GPL	33	D	A/C		Α	Yes	1			
Gasolines: Straight run	GSR	33	D	A/C		Α	Yes	1			
Glycerine	GCR	20 ²	D	E		Α	Yes	1			
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		Α	Yes	1			
Heptanoic acid	HEP	4	D	E		Α	Yes	1			
Heptanol (all isomers)	HTX	20	D	D/E		Α	Yes	1			
Heptene (all isomers)	HPX	30	D	С.		Α	Yes	2	*		
Heptyl acetate	HPE	34	D	Е		Α	Yes	1			
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 ²	D	B/C		Α	Yes	1			
Hexanoic acid	HXO	4	D	Е		Α	Yes	1			
Hexanol	HXN	20	D	D		Α	Yes	1			
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2			
Hexylene glycol	HXG	20	D	E		Α	Yes	1	***************************************		
Isophorone	IPH	18 ²	D	Е		Α	Yes	1			
Jet fuel: JP-4	JPF	33		E		A	Yes	1			
Jet fuel: JP-5 (kerosene, heavy)	JPV	33			5	Α	Yes	1			
Kerosene	KRS	33	D			Α	Yes	1		-	
	MTT	34				Α	Yes	1			
Methyl alcehol	MAL	20 ²	D	C		Α	Yes	1			
Methyl alcohol	MAC	34	D	D		Α	Yes	1			
Methylamyl acetate	MAA	20	D	D		Α	Yes	1			
Methylamyl alcohol	MAK	18	D	D		A	Yes	1			
Methyl amyl ketone	MBE	41 2	D	C		A	Yes	1			
Methyl tert-butyl ether	MBK	18	D	C		A	Yes	1			
Methyl butyl ketone	MBU	34	D	C		A	Yes	1			
Methyl butyrate	MEK	18 ²	D	C			Yes	1			
Methyl ethyl ketone			D	D		A	Yes	1			
Methyl heptyl ketone	MHK	18 18 ²	D	С		A	Yes	1			
Methyl isobutyl ketone	MIK			E		A	Yes	1			
Methyl naphthalene (molten)	MNA	32	D					1			
Mineral spirits	MNS		D	D		Α	Yes	1			
Myrcene	MRE		D	D #		Α					
Naphtha: Petroleum	PTN	33	D	#		A	Yes Yes	1			
Naphtha: Solvent	NSV	33	D	D		A		1			
Naphtha: Stoddard solvent	NSS	33	D	D		Α	Yes	1			
Naphtha: Varnish makers and painters (75%)	NVM		D	С		A	Yes				
Nonane (all isomers), see Alkanes (C6-C9)	NAX		D	D		Α	Yes	1			
Nonene (all isomers)	NON		D	D		A	Yes				
Nonyl alcohol (all isomers)	NNS		D	E		A	Yes				
Nonyl phenol	NNP		D	E		A	Yes				
Nonyl phenol poly(4+)ethoxylates	NPE		D	E		Α	Yes		- J		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	С		A	Yes	1			



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Vessel Name: KIRBY 10502 Official #: CG034010

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Shipyard: ST. LOUIS

Cargo Identification							Conditions of Carriage				
						Vapor Recovery					
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period	
Octanoic acid (all isomers)	OAY	4	D	E		Α -	Yes	1			
Octanol (all isomers)	OCX	20 ²	D	E		Α	Yes	1			
Octene (all isomers)	OTX	30	, D	С		Α	Yes	2			
Oil, fuel: No. 2	OTW	33	D	D/E		Α	Yes	1	THE SECOND STATE OF THE SE		
Oil, fuel: No. 2-D	OTD	33	D	D		Α	Yes	1			
Oil, fuel: No. 4	OFR	33	D	D/E		Α	Yes	1			
Oil, fuel: No. 5	OFV	33	D	D/E		Α	Yes	1			
Oil, fuel: No. 6	OSX	33	D	E		Α	Yes	1			
Oil, misc: Crude	OIL	33	D	C/D		Α	Yes	1			
Oil, misc: Diesel	ODS	33	D	D/E		Α	Yes	1			
Oil, misc: Gas, high pour	OGP	33	D	E		Α	Yes	1			
Oil, misc: Lubricating	OLB	33	D	Е		Α	Yes	1			
Oil, misc: Residual	ORL	33	D	Е		A·	Yes	1			
Oil, misc: Turbine	OTB	33	D	E		Α	Yes	1			
n-Pentyl propionate	PPE	34	D	D		Α	Yes	1			
alpha-Pinene	PIO	30	D	D		Α	Yes	1			
beta-Pinene	PIP	30	D	D		Α	Yes	1			
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	Е		Α	Yes	1			
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	Е		Α	Yes	1	0		
Polybutene	PLB	- 30	D	E		Α	Yes	1			
Polypropylene glycol	PGC	40	D	E		Α	Yes	1			
iso-Propyl acetate	IAC	34	D	С		Α	Yes	1			
n-Propyl acetate	PAT	34	D	С		Α	Yes	1			
iso-Propyl alcohol	IPA	20 ²	D	С		Α	Yes	1			
n-Propyl alcohol	PAL	20 ²	D	С		Α	Yes	. 1			
Propylbenzene (all isomers)	PBY	32	D	D		Α	Yes	1			
iso-Propylcyclohexane	IPX	31	D	D		Α	Yes	1			
Propylene glycol	PPG	20 ²	D	E		Α	Yes	1			
Propylene glycol methyl ether acetate	PGN	34	D	D		Α	Yes	1			
Propylene tetramer	PTT	30	D	D		Α	Yes	1			
Sulfolane	SFL	39	D	E		Α	Yes	1			
Tetraethylene glycol	TTG	40	D	E		A	Yes	1	0 1		
Tetrahydronaphthalene	THN	32	D	E		Α	Yes	1			
Toluene	TOL	32	D	С		Α	Yes	1			
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	E		Α	Yes	1			
Triethylbenzene	TEB	32	D	E		Α	Yes	1			
Triethylene glycol	TEG	40	D	E		Α	Yes	1			
Triethyl phosphate	TPS	34	D	Е		Α	Yes	1			
Trimethylbenzene (all isomers)	TRE	32	D	{D}		Α	Yes	1			
Trixylenyl phosphate	TRP	34	D	E		Α	Yes	1			
Undecene	UDC	30	D	D/E		Α	Yes	1			
1-Undecyl alcohol	UND	20	D .	Е		Α	Yes	1			
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		Α	Yes	1			



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

Serial #:

C1-1300516

Dated: 26-Apr-13

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 10502

Shipyard: ST. LOUIS

Hull #: 5544

Official #: CG034010

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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

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. Cargoes must be checked for compatibility using the figures, tables, and appendices of 46 CFR 150 in conjunction with the assigned reactive group number.

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

Note 1

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

Subchanter Subchapter D Subchapter C

Note 3

A, B, C

Grade

Note 4 NA

Hull Type

See Appendix I to 46 CFR Part 150 - exceptions to the compatability chart. The subchanter 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

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.

Flammable liquid cargoes, as defined in 46 CFR 30-10.22 Combustible liquid cargoes, as defined in 46 CFR 30-10.15.

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. 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.

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 the 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 sufficeint 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 Vapor Recover Approved (Y or N) The vessel's tank group (as defined in Section 4) which is authorized for carriage of the named cargo.

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 Vapor Recover Approved (Y or N) 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.

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 156.120, 33 CFR 156.170, 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 componenets 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 overfill protection requirement of 46 CFR 39.20-9. This requirement is in addition to the requirements of Category 1

Category 4

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. (High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5.

Category 7 none

The cargo has not been evaluated/classified for use in vapor control systems