		Certífi	united	States of A t of Homela States Coas e of L	nd Securi t Guard	pect	Certification D Expiration Da	ate: 01 Sep 202
Vessel Name	For ships on internat	onal voyages this certificate Official N		ements of SOLAS 74		Call Sign	Senice	
KIRBY 28193		12394	103				Tank	Barge
Hailing Port WILMINGTON	N, DE		tuli Material Steel	Horse	IOW BY	Propulsk	91	
UNITED STA	TES							
Place Built ASHLAND CI UNITED STA			very Date May2012	Keel Laid Date 02May2012	Gross Tons R-1632 I-	Net Tons R-1632 I-	DWT	Length R-300.0 H0
This vessel mu 0 Certified Life 0 Masters 0 Chief Mates 0 Second Mat	eboatmen, 0 (	d with the following Certified Tankerme 0 Licensed Mates 0 First Class Pilots 0 Radio Officers	o Chief E 0 First A	and unlicensed Type Rating, a Engineers ssistant Enginee d Assistant Enginee	o C s	II. Included SS Opera Dilers	l in which there tors.	e must be
0 Third Mates 0 Master First 0 Mate First C		0 Able Seamen 0 Ordinary Seamen 0 Deckhands	0 Licens	Assistant Engine ed Engineers ed Member Engi				
In addition, this Persons allow	s vessel may					ons in addi	ition to crew, ar	nd no Others. Total
Lakes, E Also, in fair Florida. This vessel h (2). If this vessel must h notified in t	Bays, and r weather on has been gravessel is on be inspected writing as s	ly, not more the nted a fresh wa perated in salt using salt wat oon as this chan	an twelve ter servic water mor er interva nge in sta	ce examinati ce than six ils per 46 C atus occurs.	on interva (6) months FR 31.10-2	il in acco in any t l(a)(l) a	ordance with 4	d Carrabelle, 46 CFR 31.10-21(a) onth period, the zant OCMI must be
With this Inspe	ction for Cerl	R ADDITIONAL	en comple	ted at Freepo	rt. TX. UN	ITED STA	TES, the Office applicable vess	er in Charge, Marine sel inspection laws a
the rules and r	equiations pro	riodic/Re-Inspection	er.	and a large	his certific	1.1.2	02 0	1-
Date	Zone	A/P/R	Signatu	re	COLOR INCOMENTS	State of the state	the second se	BY DIRECTION
Q113/23 8/14/24	Hon		dien M	a ho-of -	fficer in Chaige,	the second se	m kouston-Galves	ton
			the set of the des	k	spection Zone			

USCO. CG-841 (Rav 4-2000)(v2)	

98-89		Department o	tates of America f Homeland Securi	Certification		
		-	ates Coast Guard			
	Cer	tífícate	of Insp	pection		
Vessel Name: KIRBY 28	193					
Inspection Proc Tank Barge Act:	gram (TBSIP). Inspe	ection activities ab spection issues conc	oard this barge sha	istricts' Tank Barge all be conducted in should be directed t	accordance with	its
Hull Exam	S					
Exam Type	Next	Exam	Last Exam	Prior Ex	am	
DryDock	31Ma	y2032	29Jul2022	25May2	012	
Internal Structure	e 31Ma	y2027	29Jul2022	21Jun20	)17	
Liquid/Ga	as/Solid Cargo	Authority/Condit	ions			
Authorization:	FLAMMABLE, CO	MBUSTIBLE AND SPE	ECIFIED HAZARDOL	JS CARGOES		
Total Capacity	Units	Highest Grade Type	Part151 Regulated	d Part153 Regulated	Part154 Regula	ted
28500	Barrels	А	Yes	No	No	
*Hazardous Bu	Ik Solids Authority*					
Not Authorized						
*Loading Const	traints - Structural*					
Tank Number		Max Cargo Weight	per Tank (short tons)	Maximum Dens	ity (lbs/gal)	
1 P/S		867		13.6		
2 P/S		833		13.6		
3 P/S		761		13.6		
*Loading Cons	traints - Stability*					
Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description		
н	3814	10ft 0in	13.6	R, LBS		
ш	4690	11ft 9in	13.6	R, LBS		

#### \*Conditions Of Carriage\*

Only those cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial # C1-1200902, dated February 15, 2012, may be carried, and then only in the tanks indicated. 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 197, Subpart C are applied.

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 compatibility group numbers from the "Compat Group No" column listed in the vessel's CAA.

The maximum design density of cargo which may be filled to the tank top is 13.6 lbs/gal.

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



United States of America Department of Homeland Security United States Coast Guard Certification Date:01 Sep 2022Expiration Date:01 Sep 2027

Certificate of Inspection

Vessel Name: KIRBY 28193

\*Vapor Control Authorization\*

In accordance with 46 CFR Part 39, excluding part 39.4000, this vessel's vapor collection system (VCS) has been inspected to the plans approved by MSC Letter # C1-1200902 dated February 15, 2012 and has been found acceptable for the collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column. The VCS system has been approved with a pressure side of 6 psig P/V valve with Coast Guard Approval 162.017/0000167/3. The cargo tank top is suitable for a maximum allowable working pressure (MAWP) of 6.5 psig.

In accordance with 46 CFR Part 39.5000, this vessel's VCS has been evaluated and approved for multi-breasted tandem loading with other vessels specifically approved by Marine Safety Center letter Serial No. C1-1203616 dated August 7, 2012.

. 1							
	Inspection Status						
	*Fuel Tanks*				i.		
		Internal Exami	inations				
	Tank ID	Previous	Last	Next			
	Machinery Deck	-	25May2012	-			
	*Cargo Tanks*						
		Internal Exam			External Exam	1	
	Tank Id	Previous	Last	Next	Previous	Last	Next
	1 P/S	25May2012	29Jul2022	31May2032	21Jun2017	29Jul2022	31May2027
	2 P/S	25May2012	29Jul2022	31May2032	21Jun2017	29Jul2022	31May2027
	3 P/S	25May2012	29Jul2022	31May2032	21Jun2017	29Jul2022	31May2027
				Hydro Test			
	Tank Id	Safety Valves		Previous	Last	Next	
	1 P/S	-		-	25May2012	-	
	2 P/S	-		-	25May2012	-	
	3 P/S	-		-	25May2012	-	
	Conditional Portab	le Fire Exti	nguisher Re	equirements	S		
	Required Only During Transf	an of Corres or (	Operation of Pa	rao Machinon			

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: KIRBY 28193

Official #: 1239403

Shipyard: TRINITY MARINE, ASHLAND CITY

Hull #: 4875

Tank Group Information	roup Information Cargo Identification Tanks			Cargo Transfer		Environmental Control		Fire	Special Requirements								
Tnk Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Seg Tank	-	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Temp Cont
A #1P/S, #2P/S, #3P/S	13.6	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	II	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), (h), (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 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 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			
Authorized Subchapter O Cargoes													
Acetonitrile	ATN	37	0	С	III	Α	Yes	3	No	G			
Acrylonitrile	ACN	15 <sup>2</sup>	0	С	П	А	Yes	4	.50-70(a), .55-1(e)	G			
Adiponitrile	ADN	37	0	Е	Ш	Α	Yes	1	No	G			
Alkyl(C7-C9) nitrates	AKN	34 <sup>2</sup>	0	NA	111	А	No	N/A	.50-81, .50-86	G			
Aminoethylethanolamine	AEE	8	0	Е	111	А	Yes	1	.55-1(b)	G			
Ammonium bisulfite solution (70% or less)	ABX	43 <sup>2</sup>	0	NA	III	А	No	N/A	.50-73, .56-1(a), (b), (c)	G			
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	III	Α	No	N/A	.56-1(a), (b), (c), (f), (g)	G			
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	П	А	No	N/A	No	G			
Benzene	BNZ	32	0	С	111	А	Yes	1	.50-60	G			
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	BHB	32 <sup>2</sup>	0	С	III	Α	Yes	1	.50-60	G			
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	BHA	32 <sup>2</sup>	0	С	111	А	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	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Butyl methacrylate	BMH	14	0	D	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Butyraldehyde (all isomers)	BAE	19	0	С	III	Α	Yes	1	.55-1(h)	G			
Camphor oil (light)	CPO	18	0	D	Ш	А	No	N/A	No	G			
Carbon tetrachloride	CBT	36	0	NA	III	Α	No	N/A	No	G			
Caustic potash solution	CPS	5 <sup>2</sup>	0	NA	III	Α	No	N/A	.50-73, .55-1(j)	G			
Caustic soda solution	CSS	5 <sup>2</sup>	0	NA	111	А	No	N/A	.50-73, .55-1(j)	G			
Chemical Oil (refined, containing phenolics)	COD	21	0	Е	Ш	А	No	N/A	.50-73	G			
Chlorobenzene	CRB	36	0	D	111	А	Yes	1	No	G			
Chloroform	CRF	36	0	NA	III	А	Yes	3	No	G			
Coal tar naphtha solvent	NCT	33	0	D	111	А	Yes	1	.50-73	G			
Creosote	CCW	21 <sup>2</sup>	0	Е	111	А	Yes	1	No	G			
Cresols (all isomers)	CRS	21	0	Е	111	А	Yes	1	No	G			
Cresylate spent caustic	CSC	5	0	NA	111	А	No	N/A	.50-73, .55-1(b)	G			
Cresylic acid tar	CRX		0	Е	111	А	Yes	1	.55-1(f)	G			
Crotonaldehyde	CTA	19 <sup>2</sup>	0	С	П	А	Yes	4	.55-1(h)	G			
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	111	А	No	N/A	No	G			
Cyclohexanone	CCH	18	0	D	Ш	А	Yes	1	.56-1(a), (b)	G			
Cyclohexanone, Cyclohexanol mixture	CYX	18 <sup>2</sup>	0	Е	111	А	Yes	1	.56-1 (b)	G			



#### **Certificate of Inspection** Cargo Authority Attachment

Vessel Name: KIRBY 28193

Official #: 1239403

Page 2 of 8

Shipyard: TRINITY MARINE, ASHLAND CITY Hull #: 4875

Cargo Identification Conditions of Carriage Vapor Recovery VCS Chem Compat Sub Hull Tank App'd Special Requirements in 46 CER Insp Code Group No Grade Group or N) Category 151 General and Mat'ls of hapter Туре Name Period G CHA Ш .56-1(a), (b), (c), (g) Cyclohexylamine 7 0 D А Yes 1 CSB 30 0 D Ш А Yes 1 .50-60, .56-1(b) G Cyclopentadiene, Styrene, Benzene mixture .50-70(a), .50-81(a), (b), .55-1(c) G IAI Е ш 2 iso-Decyl acrylate 14 0 А Yes .56-1(a), (b) G DBX 36 Е ш Dichlorobenzene (all isomers) 0 А Yes 3 0 С ш No G 1,1-Dichloroethane DCH 36 Α Yes 1 DEE 41 0 D Ш А Yes 1 .55-1(f) G 2.2'-Dichloroethyl ether DCM 36 0 NA ш А 5 No G Dichloromethane Yes .56-1(a), (b), (c), (g) DDE 43 0 Е Ш N/A G 2.4-Dichlorophenoxyacetic acid, diethanolamine salt solution А No 2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution DAD 0 1,2 0 А ш А No N/A .56-1(a), (b), (c), (g) G DTI 43 <sup>2</sup> 0 Е ш А N/A .56-1(a), (b), (c), (g) G No 2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution DPB С ш No G 36 0 A Yes 3 1,1-Dichloropropane G DPP 36 0 С Ш А Yes 3 No 1,2-Dichloropropane DPC 36 0 С ш А Yes 3 No G 1,3-Dichloropropane No G DPU 15 0 D Ш А 4 Yes 1,3-Dichloropropene No G DMX 0 С Ш А 1 Dichloropropene, Dichloropropane mixtures 15 Yes 0 Е Ш 1 .55-1(c) G DEA 8 А Yes Diethanolamine 7 0 С ш 3 .55-1(c) G DEN А Yes Diethylamine G 72 .55-1(c) Е ш Diethylenetriamine DFT 0 А Yes 1 .55-1(c) G DBU 7 0 D Ш А Yes 3 Diisobutylamine .55-1(c) G DIP 8 0 Е Ш А Yes 1 Diisopropanolamine 7 0 С Ш 3 .55-1(c) G DIA А Yes Diisopropylamine .56-1(b) G 0 Е ш 3 N,N-Dimethylacetamide DAC 10 A Yes .56-1(b), (c) G DMB 8 0 D ш А 1 Dimethylethanolamine Yes .55-1(e) G DMF 10 0 D Ш А Yes 1 Dimethylformamide DNA 0 С Ш А .55-1(c) G 7 Yes 3 Di-n-propylamine .56-1(b) G Dodecyldimethylamine, Tetradecyldimethylamine mixture DOT 7 0 F ш А No N/A Dodecyl diphenyl ether disulfonate solution DOS 43 0 # Ш А No N/A No G 0 D Ш N/A No G EE Glycol Ether Mixture EEG 40 А No MEA Е .55-1(c) G 8 0 ш Ethanolamine А Yes 1 .50-70(a). .50-81(a). (b) G EAC 0 С Ш А Yes 2 Ethyl acrylate 14 .55-1(b) G Ethylamine solution (72% or less) EAN 7 0 А Ш А Yes 6 D Ш .55-1(b) G EBA 0 А 3 7 Yes N-Ethylbutylamine .55-1(b) G D ш ECC 7 0 А Yes 1 N-Ethylcyclohexylamine G 0 Е Ш 1 No Ethylene cyanohydrin ETC 20 А Yes .55-1(c) G EDA 7 2 0 D ш А Yes 1 Ethylenediamine 36<sup>2</sup> С Ш No G 0 Yes 1 EDC А Ethylene dichloride No G 0 ш EGH 40 Е A No N/A Ethylene glycol hexyl ether 0 D/E Ш No G EGC 40 А Yes 1 Ethylene glycol monoalkyl ethers G 40 0 Е Ш А No Ethylene glycol propyl ether EGP Yes 1 .50-70(a), .50-81(a), (b) G F ш 2 2-Ethylhexyl acrylate FAI 14 0 A Yes .50-70(a) G ETM 0 D/E ш А 2 Ethyl methacrylate 14 Yes No G EPA 19<sup>2</sup> 0 Е Ш А Yes 1 2-Ethyl-3-propylacrolein G FMS 19 <sup>2</sup> .55-1(h) Formaldehyde solution (37% to 50%) 0 D/E Ш А 1 Yes .55-1(h) G FFA 19 0 D ш A Yes 1 Furfural G Glutaraldehyde solution (50% or less) GTA 19 0 NA Ш А No N/A No Hexamethylenediamine solution .55-1(c) G HMC 7 0 Е Ш А Yes 1 G нмі 0 С Ш А .56-1(b), (c) 7 Yes 1 Hexamethyleneimine .50-70(a), .50-81(a), (b) G HFN 0 С ш А Hydrocarbon 5-9 Yes 1



## Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 28193

Official #: 1239403

Page 3 of 8

Shipyard: TRINITY MARINE, ASHLAND CITY Hull #: 4875

Cargo Identification						Conditions of Carriage							
	1		1	1		Vapor Recovery							
Name	Chem Code IPR	Compat Group No 30	Sub Chapter O	Grade	Hull Type III	Tank Group A	App'd	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of .50-70(a), .50-81(a), (b)	Insp. Period G			
	IPN	30	0	B			No	, N/A	.50-70(a), .55-1(c)	G			
Isoprene, Pentadiene mixture Kraft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	KPL	5	0	NA	111	A	No	N/A	.50-73, .56-1(a), (c), (g)	G			
Mesityl oxide	MSO	18 <sup>2</sup>	0	D	111	А	Yes	1	No	G			
Methyl acrylate	MAM	10	0	C		A	Yes	2	.50-70(a), .50-81(a), (b)	G			
Methylcyclopentadiene dimer	MCK	30	0	C		A	Yes	1	No	G			
Methyl diethanolamine	MDE	8	0	E		A	Yes	1	.56-1(b), (c)	G			
2-Methyl-5-ethylpyridine	MEP	9	0	E		A	Yes	1	.55-1(e)	G			
Methyl methacrylate	MMM		0	c		A	Yes	2	.50-70(a), .50-81(a), (b)	G			
2-Methylpyridine	MPR	9	0	D		A	Yes	3	.55-1(c)	G			
alpha-Methylstyrene	MSR	30	0	D		A	Yes	2	.50-70(a), .50-81(a), (b)	G			
Morpholine	MPL	7 2	0	D		A	Yes	1	.55-1(c)	G			
Nitroethane	NTE	42	0	D		A	No	N/A	.50-81, .56-1(b)	G			
1- or 2-Nitropropane	NPM	42	0	D		A	Yes	1	.50-81	G			
1,3-Pentadiene	PDE	30	0	A		A	Yes	7	.50-70(a), .50-81	G			
Perchloroethylene	PER	36	0	NA		A	No	, N/A	No	G			
Polyethylene polyamines	PEB	7 <sup>2</sup>	0	E		A	Yes	1	.55-1(e)	G			
iso-Propanolamine	MPA	8	0	E		A	Yes	1	.55-1(c)	G			
Propanolamine (iso-, n-)	PAX	8	0	E		A	Yes	1	.56-1(b), (c)	G			
iso-Propylamine	IPP	7	0	A		A	Yes	5	.55-1(c)	G			
Pyridine	PRD	9	0	C		A	Yes	1	.55-1(e)	G			
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide)	SAP	5	0	0	111	A	No	N/A	.50-73, .55-1(j)	G			
Sodium aluminate solution (45% or less)	SAU	5	0	NA	111	А	No	N/A	.50-73, .56-1(a), (b), (c)	G			
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA		А	No	N/A	.50-73	G			
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA		А	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		А	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	А	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	А	No	N/A	.50-73, .55-1(b)	G			
Styrene (crude)	STX		0	D		А	Yes	2	No	G			
Styrene monomer	STY	30	0	D	Ш	А	Yes	2	.50-70(a), .50-81(a), (b)	G			
1,1,2,2-Tetrachloroethane	TEC	36	0	NA		А	No	N/A	No	G			
Tetraethylenepentamine	TTP	7	0	Е		А	Yes	1	.55-1(c)	G			
Tetrahydrofuran	THF	41	0	С		А	Yes	1	.50-70(b)	G			
Toluenediamine	TDA	9	0	Е	П	А	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G			
1,2,4-Trichlorobenzene	TCB	36	0	Е	Ш	А	Yes	1	No	G			
1,1,2-Trichloroethane	TCM	36	0	NA	Ш	А	Yes	1	.50-73, .56-1(a)	G			
Trichloroethylene	TCL	36 <sup>2</sup>	0	NA	111	А	Yes	1	No	G			
1,2,3-Trichloropropane	TCN	36	0	Е	Ш	А	Yes	3	.50-73, .56-1(a)	G			
Triethanolamine	TEA	8 <sup>2</sup>	0	Е	111	А	Yes	1	.55-1(b)	G			
Triethylamine	TEN	7	0	С	Ш	А	Yes	3	.55-1(e)	G			
Triethylenetetramine	TET	7 2	0	Е	111	А	Yes	1	.55-1(b)	G			
Triphenylborane (10% or less), caustic soda solution	TPB	5	0	NA	Ш	А	No	N/A	.56-1(a), (b), (c)	G			
Trisodium phosphate solution	TSP	5	0	NA	111	А	No	N/A	.50-73, .56-1(a), (c).	G			
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA		А	No	N/A	.56-1(b)	G			
Vanillin black liquor (free alkali content, 3% or more).	VBL	5	0	NA		А	No	N/A	.50-73, .56-1(a), (c), (g)	G			
Vinyl acetate	VAM	13	0	С	111	А	Yes	2	.50-70(a), .50-81(a), (b)	G			
			•	2				-					



### Certificate of Inspection Cargo Authority Attachment

Page 4 of 8

Vessel Name: KIRBY 28193 Official #: 1239403 Shipyard: TRINITY MARINE, ASHLAND CITY Hull #: 4875

Cargo Identification	on						Conditions of Carriage				
							Vapor Re		liono or currugo		
Name Vinyl neodecanate	Chem Code VND	Compat Group No 13	Sub Chapter O	Grade E	Hull Type III	Tank Group A	App'd	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of .50-70(a), .50-81(a), (b)	Insp. Period G	
Vinyltoluene	VNT	13	0	D		А	Yes	2	.50-70(a), .50-81, .56-1(a), (b), (c), (	G	
Subchapter D Cargoes Authorized for Vapor Contro		18 <sup>2</sup>		0		•	N <sub>a</sub> a	4			
Acetone	ACT		D	C		A	Yes	1			
	ACP	18	D	E		A	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	D		A	Yes	1			
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		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)	BFX	20	D	E		A	Yes	1			
Butyl acetate (all isomers)	BAX	34	D	D		А	Yes	1			
Butyl alcohol (iso-)	IAL	20 <sup>2</sup>	D	D		А	Yes	1			
Butyl alcohol (n-)	BAN	20 <sup>2</sup>	D	D		А	Yes	1			
Butyl alcohol (sec-)	BAS	20 <sup>2</sup>	D	С		А	Yes	1			
Butyl alcohol (tert-)	BAT		D	С		А	Yes	1			
Butyl benzyl phthalate	BPH	34	D	Е		А	Yes	1			
Butyl toluene	BUE	32	D	D		А	Yes	1			
Caprolactam solutions	CLS	22	D	Е		Α	Yes	1			
Cyclohexane	CHX	31	D	С		Α	Yes	1			
Cyclohexanol	CHN	20	D	Е		А	Yes	1			
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		А	Yes	2			
p-Cymene	CMP	32	D	D		А	Yes	1			
iso-Decaldehyde	IDA	19	D	Е		Α	Yes	1			
n-Decaldehyde	DAL	19	D	Е		А	Yes	1			
Decene	DCE	30	D	D		А	Yes	1			
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>	D	Е		А	Yes	1			
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	Е		А	Yes	1			
Diacetone alcohol	DAA	20 <sup>2</sup>	D	D		А	Yes	1			
ortho-Dibutyl phthalate	DPA	34	D	Е		А	Yes	1			
Diethylbenzene	DEB	32	D	D		А	Yes	1			
Diethylene glycol	DEG	40 <sup>2</sup>	D	Е		А	Yes	1			
Diisobutylene	DBL	30	D	С		А	Yes	1			
Diisobutyl ketone	DIK	18	D	D		А	Yes	1			
Diisopropylbenzene (all isomers)	DIX	32	D	Е		А	Yes	1			
Dimethyl phthalate	DTL	34	D	Е		А	Yes	1			
Dioctyl phthalate	DOP	34	D	Е		А	Yes	1			
Dipentene	DPN	30	D	D		А	Yes	1			
Diphenyl	DIL	32	D	D/E		А	Yes	1			
Diphenyl, Diphenyl ether mixtures	DDO	33	D	Е		А	Yes	1			
Diphenyl ether	DPE	41	D	{E}		А	Yes	1			
Dipropylene glycol	DPG	40	D	E		А	Yes	1			
Distillates: Flashed feed stocks	DFF	33	D	E		А	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			



## Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 28193

Official #: 1239403

Page 5 of 8

Shipyard: TRINITY MARINE, ASHLAND CITY Hull #: 4875

Cargo Identification	n							Condi	tions of Carriage	
	1			-					cions of carriage	
Name 2-Ethoxyethyl acetate	Chem Code EEA	Compat Group No 34	Sub Chapter D	Grade D	Hull Type	Tank Group A	Vapor R App'd (Y or N) Yes	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
	ETG	40	D	E		A	Yes	1		
Ethoxy triglycol (crude)	ETA	34	D	C		A	Yes	1		
Ethyl acetate	EAA	34	D	E		A	Yes	1		
Ethyl acetoacetate	EAL	20 2	D	C		A	Yes	1		
Ethyl alcohol				c						
Ethylbenzene	ETB	32	D	D		A	Yes	1		
Ethyl butanol	EBT	20		C		A	Yes			
Ethyl tert-butyl ether	EBE	41	D			A	Yes	1		
Ethyl butyrate	EBR	34	D	D		A	Yes	1		
Ethyl cyclohexane	ECY	31	D	D		A	Yes	1		
Ethylene glycol	EGL	20 <sup>2</sup>	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	Е		А	Yes	1		
Ethyl propionate	EPR	34	D	С		A	Yes	1		
Ethyl toluene	ETE	32	D	D		А	Yes	1		
Formamide	FAM	10	D	E		А	Yes	1		
Furfuryl alcohol	FAL	20 <sup>2</sup>	D	Е		A	Yes	1		
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		A	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) Gasolines: Aviation (containing not over 4.86 grams of lead per	GAT GAV	33 33	D	c c		A A	Yes Yes	1		
gallon)										
Gasolines: Casinghead (natural)	GCS	33	D	A/C		A	Yes	1		
Gasolines: Polymer	GPL	33	D	A/C		А	Yes	1		
Gasolines: Straight run	GSR	33	D	A/C		Α	Yes	1		
Glycerine	GCR	20 <sup>2</sup>	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	Е		Α	Yes	1		
Heptanol (all isomers)	HTX	20	D	D/E		А	Yes	1		
Heptene (all isomers)	HPX	30	D	С		Α	Yes	2		
Heptyl acetate	HPE	34	D	Е		А	Yes	1		
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	D	B/C		А	Yes	1		
Hexanoic acid	HXO	4	D	E		Α	Yes	1		
Hexanol	HXN	20	D	D		Α	Yes	1		
Hexene (all isomers)	HEX	30	D	С		А	Yes	2		
Hexylene glycol	HXG	20	D	Е		А	Yes	1		
Isophorone	IPH	18 <sup>2</sup>	D	Е		А	Yes	1		
Jet fuel: JP-4	JPF	33	D	Е		А	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		А	Yes	1		
Kerosene	KRS	33	D	D		А	Yes	1		
Methyl acetate	MTT	34	D	D		А	Yes	1		
Methyl alcohol	MAL	20 <sup>2</sup>	D	С		А	Yes	1		
Methylamyl acetate	MAC	34	D	D		А	Yes	1		
Methylamyl alcohol	MAA	20	D	D		А	Yes	1		
Methyl amyl ketone	MAK	18	D	D		Α	Yes	1		



## Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 28193

Official #: 1239403

Page 6 of 8

Shipyard: TRINITY MARINE, ASHLAND CITY Hull #: 4875

Cargo Identification	<u>ו</u>							Condi	tions of Carriage				
						Vapor Recovery							
Name Methyl tert-butyl ether	Chem Code MBE	Compat Group No 41 <sup>2</sup>	Sub Chapter D	Grade C	Hull Type	Tank Group A	App'd (Y or N) Yes	VCS Category 1	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period			
Methyl butyl ketone	MBK	18	D	C		A	Yes	1					
	MBU	34	D	c		A	Yes	1					
Methyl butyrate	MEK	18 <sup>2</sup>	D	c		A	Yes	1					
Methyl ethyl ketone	MHK	18 -	D	D		A	Yes	1					
Methyl heptyl ketone	MIK	18 <sup>2</sup>		C				1					
Methyl isobutyl ketone			D	E		A	Yes						
Methyl naphthalene (molten)	MNA	32	D			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	С		Α	Yes	1					
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		Α	Yes	1					
Nonene (all isomers)	NON	30	D	D		A	Yes	2					
Nonyl alcohol (all isomers)	NNS	20 <sup>2</sup>	D	Е		А	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	С		A	Yes	1					
Octanoic acid (all isomers)	OAY	4	D	E		А	Yes	1					
Octanol (all isomers)	OCX	20 <sup>2</sup>	D	E		А	Yes	1					
Octene (all isomers)	OTX	30	D	С		А	Yes	2					
Oil, fuel: No. 2	OTW	33	D	D/E		Α	Yes	1					
Oil, fuel: No. 2-D	OTD	33	D	D		А	Yes	1					
Oil, fuel: No. 4	OFR	33	D	D/E		Α	Yes	1					
Oil, fuel: No. 5	OFV	33	D	D/E		А	Yes	1					
Oil, fuel: No. 6	OSX	33	D	Е		А	Yes	1					
Oil, misc: Crude	OIL	33	D	C/D		А	Yes	1					
Oil, misc: Diesel	ODS	33	D	D/E		А	Yes	1					
Oil, misc: Gas, high pour	OGP	33	D	Е		А	Yes	1					
Oil, misc: Lubricating	OLB	33	D	Е		А	Yes	1					
Oil, misc: Residual	ORL	33	D	Е		А	Yes	1					
Oil, misc: Turbine	OTB	33	D	Е		А	Yes	1					
Pentane (all isomers)	PTY	31	D	А		А	Yes	5					
Pentene (all isomers)	PTX	30	D	А		А	Yes	5					
n-Pentyl propionate	PPE	34	D	D		А	Yes	1					
alpha-Pinene	PIO	30	D	D		А	Yes	1					
beta-Pinene	PIP	30	D	D		А	Yes	1					
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	E		А	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					
iso-Propyl acetate	IAC	40 34	D	C		A	Yes	1					
n-Propyl acetate	PAT	34	D	c		A	Yes	1					
iso-Propyl alcohol	IPA	20 <sup>2</sup>	D	c		A	Yes	1					
		20 - 20 <sup>2</sup>	D				Yes						
n-Propyl alcohol	PAL PBY			C D		A A	Yes	1 1					
Propylbenzene (all isomers)	זטי	32	D	U		А	162	I					



### Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 28193 Official #: 1239403

Page 7 of 8

Shipyard: TRINITY MARINE, ASHLAND CITY Hull #: 4875

Cargo Identifica	ation					Conditions of Carriage						
							Vapor F	Recovery	_			
Name iso-Propylcyclohexane	Chem Code IPX	Compat Group No 31	Sub Chapter D	Grade D	Hull Type	Tank Group A	App'd (Y or N) Yes	VCS Category 1	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
Propylene glycol	PPG	20 <sup>2</sup>	D	Е		А	Yes	1				
Propylene glycol methyl ether acetate	PGN	34	D	D		А	Yes	1				
Propylene tetramer	PTT	30	D	D		А	Yes	1				
Sulfolane	SFL	39	D	Е		А	Yes	1				
Tetraethylene glycol	TTG	40	D	Е		А	Yes	1				
Tetrahydronaphthalene	THN	32	D	Е		А	Yes	1				
Toluene	TOL	32	D	С		А	Yes	1				
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	Е		А	Yes	1				
Triethylbenzene	TEB	32	D	Е		А	Yes	1				
Triethylene glycol	TEG	40	D	Е		А	Yes	1				
Triethyl phosphate	TPS	34	D	Е		А	Yes	1				
Trimethylbenzene (all isomers)	TRE	32	D	{D}		А	Yes	1				
Trixylenyl phosphate	TRP	34	D	Е		А	Yes	1				
Undecene	UDC	30	D	D/E		А	Yes	1				
1-Undecyl alcohol	UND	20	D	Е		А	Yes	1				
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		А	Yes	1				



# **Certificate of Inspection** Cargo Authority Attachment

Vessel Name: **KIRBY 28193** Official #: 1239403

Page 8 of 8

Shipyard: TRINITY MARI Hull #: 4875

#### 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. 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
Note 2	(202) 372-1425. See Appendix I to 46 CFR Part 150 - exceptions to the compatability chart.
Subchapter	The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified.
Subchapter D Subchapter O	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.
Note 3	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 Note 4	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
	are narmability/compositionity grade or integer cargoes may vary depending upon the hashpoint and reto 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	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 (51.10-1(b)(1).
II III	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).
NA	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 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 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	(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 1cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This requirement is in addition to the requirements of Category 1.
	() list years were and highly taxis) Must see the section ments of Categories 1, 2 and 5
Category 6	(High vapor pressure and highly toxic) Must comply with requirements of Categories 1, 3 and 5.
Category 6 Category 7	(High vapor pressure and nighty toxic) must comply with requirements of Categories 1, 3 and 5.