

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

Certification Date: 05 Aug 2021 Expiration Date: 05 Aug 2022

Temporary Certificate of Inspection

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

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

Vessel Name	Official Numb	ber	IMO Number	Call Sign	Service		
KIRBY 28170	1231717	7			Tank Ba	arge	
Hailing Port WILMINGTON, DE UNITED STATES	Hull Ste	Material eel	Horsepower	Propulsion			
Place Built ASHLAND CITY, TN UNITED STATES	Delivery 18Ma	p Date Keel Laic ay2011 13Apr	D 1632	Net Tons R-1632 I-	DWT	Length R-300.0 I-0	
Owner KIRBY INLAND MARINE I 55 WAUGH DR STE 1000 HOUSTON, TX 77007 UNITED STATES).		18350 MARKE CHANNELVIE UNITED STAT	W, TX 77530 FES			
This vessel must be manne 0 Certified Lifeboatmen, 0	ed with the following li Certified Tankermen,	icensed and un , 0 HSC Type F	licensed Personr Rating, and 0 GM	nel. Included in w IDSS Operators.	hich there m	ust be	
0 Masters	0 Licensed Mates	0 Chief Enginee	rs 0	Oilers			
0 Chief Mates	0 First Class Pilots	0 First Assistant	t Engineers				
0 Second Mates	0 Radio Officers	0 Second Assis	tant Engineers				
0 Third Mates	0 Able Seamen	0 Third Assistar	nt Engineers				
0 Master First Class Pilot	0 Ordinary Seamen	0 Licensed Engi	ineers				
0 Mate First Class Pilots	0 Deckhands	0 Qualified Mem	nber Engineer				

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

Route Permitted And Conditions Of Operation:

---Lakes, Bays, and Sounds---

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

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

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

SEE NEXT PAGE FOR ADDITIONAL CERTIFICATE INFORMATION

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

GS-13, USCG By direction
afety Unit Port Arthur
3



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

Certification Date: 05 Aug 2021 05 Aug 2022 Expiration Date:

Temporary Certificate of Inspection

Vessel Name: KIRBY 28170

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

---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

31May2031

05Aug2021

12May2011

Internal Structure

30Jun2026

05Aug2021

17Jun2016

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

Authorization:

FLAMMABLE / COMBUSTIBLE LIQUIDS AND SPECIFIED HAZARDOUS CARGOES

Total Capacity

Units

Highest Grade Type Part151 Regulated Part153 Regulated Part154 Regulated

28500

Barrel

Yes

No

No

Hazardous Bulk Solids Authority

Not Authorized

Loading Constraints - Structural

Tank Number	Max Cargo Weight per Tank (short tons)	Maximum Density (lbs/gal)
1 P/S	838	8.74
2 P/S	843	8.74
3 P/S	777	8.74

Loading Constraints - Stability

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
П	3804	10ft 0in	13.6	R, LBS, LC 0-12
ш	4680	11ft 9in	13.6	R, LBS, LC 0-12

Conditions Of Carriage

Only those cargoes named in the vessel's cargo authority attachment, serial #C1-1100494, dated Febuary 23, 2011, may be carried and then only in the tanks indicated.

Per 46 CFR 150.130, the person in charge of the vessel is responsible for ensuring 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 more benzene by volume, the person in charge is responsible for ensuring the provisions of 46 CFR part 197, subpart C are applied.

VAPOR CONTROL AUTHORIZATION

Per 46 CFR 39, excluding Part 39.4000, this vessel's vapor control system (VCS) has been inspected to the plans approved by Marine Safety Center letter serial C1-0901515 dated 15 May 2009 and extended by MSC letter Serial #C1-1100494, dated February 23, 2011, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

In accordance with 46 CFR Part 39.1017 and 39.5000(e) this vessel's VCS has been evaluated and approved for multibreasted tandem loading with other vessels specifically approved to tandem load with this vessel.

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

Dept. Of Home Sec., USCG - CG-854 (Rev. 06-04)

Page 2 of 3

OMB Approved No. 1625-0057



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

05 Aug 2021 Certification Date: 05 Aug 2022 Expiration Date:

Temporary Certificate of Inspection

Vessel Name: KIRBY 28170

with the reactive group numbers from the "Compat Group No" column listed in the vessel's cargo authority attachment.

STABILITY AND TRIM

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 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 8.74 lbs/gal. Cargoes with higher densities, up to 13.6 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

--- Inspection Status ---

Fuel Tanks

Internal Examinations

Last Next Previous Tank ID 12May2011 Machinery deck

Cargo Tanks

	Internal Exam			External Exam	n	
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	12May2011	05Aug2021	31May2031	<u></u>	-	·=
2 P/S	12May2021	05Aug2021	31May2031	-		:-
3 P/S	12May2011	05Aug2021	31May2031	-	<u>(6</u>	C _E
			Hydro Test			
Tank Id	Safety Valves	5	Previous	Last	Next	
1 P/S	-		1.	12May2011	- :	
2 P/S	.		-	12May2011	3.	
3 P/S	8		•	12May2011	€	

---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

Class Type Quantity 40-B

END

Dept Of Home Sec., USCG - CG-854 (Rev. 06-04)

Page 3 of 3

OMB Approved No. 1625-0057



Department of Homeland Security

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28170

Official #: 1231717

Shipyard: Trinity Ashland City

Serial #: C1-1100494

23-Feb-11

Hull #: 4774

46 CFR 151 Tank 0	Group (Chara	cteris	tics													
Tank Group Information	Cargo I	dentificat	ion		Cargo		Tanks		Carg		Enviror	nmental	Fire	Special Require	ments	T	
Trik Grp Tanks in Group	Density	Press,	Temp.		Seg Tank		Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction		Temp Cont
A #1P/S, #2P/S, #3P/S	13.6	Atmos.	Amb.	L1	1 ii 2 ii	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.

List of Authorized Cargoes

Cargo Identification	Conditions of Carriage									
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Re App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	insp. Period
Authorized Subchapter O Cargoes	<u> </u>									
Acetonitrile	ATN	37	0	С	[]]	A	Yes	3	No	G
Acrylonitrile	ACN	15 ²	0	С	Н	Α	Yes	4	.50-70(a), .55-1(e)	G
Adiponitrile	ADN	37	0	E	11	Α	Yes	1	No	G
Alkyl(C7-C9) nitrates	AKN	34 ²	0	NA	III	Α	No	N/A	.50-81, .50-80	G
Aminoethylethanolamine	AEE	8	0	E	III	Α	Yes	1	.55-1(b)	G
Ammonium bisuifite solution (70% or less)	ABX	43 2	0	NA	111	Α	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	11	Α	No	N/A	No	G
Benzene	BNZ	32	0	С	10	Α	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 ²	0	С	111	A	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 ²	0	С	III	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(s), .50-81(a), (b)	G
Butyl methacrylate	BMH	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Butyraidehyde (all isomers)	BAE	19	0	С	H	Α	Yes	1	.55-1(h)	G
Camphor oil (light)	CPO	18	0	D	11	Α	No	N/A	No	G
Carbon tetrachloride	CBT	36	0	NA	111	Α	No	N/A	No	G
Caustic potash solution	CPS	5 ²	0	NA	III	Α	No	N/A	.50-73, .55-1([)	G
Caustic soda solution	CSS	5 ²	0	NA	101	Α	No	N/A	.60-73, .56-1(j)	G
Chemical Oil (refined, containing phenolics)	COD	21	0	E	11	Α	No	N/A	.50-73	G
Chiorobenzene	CRB	36	0	D	III	Α	Yes	1	No	G
Chloroform	CRF	36	0	NA	111	Α	Yes	3	No	G
Coal tar naphtha solvent	NCT	33	0	D	111	Α	Yes	1	.50-73	G
Creosote	CCW	21 2	0	E	Ш	Α	Yes	1	No	G
Cresols (all isomers)	CRS	21	0	Ε	(II	Α	Yes	1	No	G
Cresylate spent caustic	CSC	5	0	NA	Ш	Α	No	N/A	.50-73, .55-1(b)	G
Cresylic acid tar	CRX	<u>.</u>	0	E	111	Α	Yes	1	.55-1(f)	G
Crotonaldehyde	CTA	19 ²	0	С	- 11	Α	Yes	4	.65-1(h)	G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	Ċ	101	Α	No	N/A	No	G
Cyclohexanone	CCH	18	0	D	111	Α	Yes	1	.58-1(a), (b)	G
Cyclohexanone, Cyclohexanol mixture	CYX	18 ²	0	Ε	H	Α	Yes	1	.66-1 (b)	G
Cyclohexylamine	CHA	7	0	D	111	Α	Yes	1	.56-1(a), (b), (c), (g)	G

^{***} This document is only valid when attached to, and referenced by a current, valid Certificate of Inspection. ***

^{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.

C1-1100494

23-Feb-11



Certificate of Inspection

Cargo Authority Attachment

Vessei Name: KIRBY 28170 Official #: 1231717

Page 2 of 8

Shipyard: Trinity Ashland City

Cargo Identification Chem Compat Code Group No Chapter Grade Type Group (Y or N) Category 151 General and Mat'ls of Cyclopentadiene, Styrene, Benzene mixture Cargo Identification Chem Compat Compat Compat Compat Grade Type Grade Type Group (Y or N) Category 151 General and Mat'ls of Cyclopentadiene, Styrene, Benzene mixture Cyclopentadiene, Styrene, Benzene mixture Cargo Identification Chem Compat Compat Grade Type Grade Type Group (Y or N) Category 151 General and Mat'ls of Cyclopentadiene, Styrene, Benzene mixture	
Name Chem Compat Sub Chapter Grade Type Group Tank App'd VCS Special Requirements in 46 CF	.
Cyclonentadiene Styrene Renzene mixture CSB 30 O D III A Vec 4 50-60 56-1(b)	R Insp. Period
Systemations, styrens, settletic mixture out of 0 0 mill 7 (65 1 mostlet 4)	G
iso-Decyl acrylate IAI 14 O E III A Yes 2 .50-70(a), .50-91(a), (b), .55-1(c)	G
Dichlorobenzene (all isomers) DBX 36 O E III A Yes 3 .58-1(a), (b)	G
1,1-Dichloroethane DCH 36 O C III A Yes 1 №	G
2,2'-Dichloroethyl ether DEE 41 O D II A Yes 1 .55-10)	G
Dichloromethane DCM 36 O NA III A Yes 5 No	G
2,4-Dichforophenoxyacetic acid, diethanolamine salt solution DDE 43 O E III A No N/A .58-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution DAD 0 1,2 O A III A No N/A .58-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution DTI 43 ² O E III A No N/A ^{56-1(e), (e), (e)}	G
1,1-Dichloropropane DPB 36 O C III A Yes 3 No	G
1,2-Dichloropropane DPP 36 O C III A Yes 3 No	G
1,3-Dichloropropane DPC 36 O C III A Yes 3 No	G
1,3-Dichloropropene DPU 15 O D II A Yes 4 No	G
Dichloropropene, Dichloropropane mixtures DMX 15 O C II A Yes 1 No	G
Diethanotamine DEA 8 O E III A Yes 1 .55-1(c)	G
Diethylamine DEN 7 O C III A Yes 3 .55-1(c)	G
Diethylenetriamine DET 72 O E III A Yes 1 .55-1(c)	G
Diisobutylamine DBU 7 O D III A Yes 3 .56-1(c)	G
Dilsopropanolamine DIP 8 Q E III A Yes 1 .56-1(c)	G
Diisopropylamine DIA 7 O C II A Yes 3 .55-1(c)	G
N,N-Dimethylacetamide DAC 10 O E III A Yes 3 56-1(b)	G
Dimethylethanolamine DMB 8 O D III A Yes 1 .56-1(b), (c)	G
Dimethylfomamide DMF 10 O D III A Yes 1 .55-1(e)	G
DI-n-propylamine DNA 7 O C II A Yes 3 .55-1(c)	G
Dodecyldlmethylamine, Tetradecyldimethylamine mixture DOT 7 O E III A No N/A 56-1(b)	G
	G
Dodecyl diphenyl ether disulfonate solution DOS 43 O # II A No N/A No EE Glycol Ether Mixture EEG 40 O D III A No N/A No	G
	G
	G
	G
- The state of the	- G
	G
N-Ethylcyclohexylamine ECC 7 O D III A Yes 1 .55-1(b) Ethylcyclohexylamine FTC 20 O F III A Yes 1 No	G
Ello Ed O E III A 100 I	G
Ethylenedlamine EDA 7 2 O D III A Yes 1 .56-1(c)	
Ethylene dichloride EDC 36 ² O C III A Yes 1 No	G
Ethylene glycol hexyl ether EGH 40 O E III A No N/A No	G
Ethylene glycol monoalkyl ethers EGC 40 O D/E III A Yes 1 No	G
Ethylene glycol propyl ether EGP 40 O E III A Yes 1 No	<u> </u>
2-Ethylhexyl acrylate EAI 14 O E III A Yes 2 .50-70(a), .50-81(a), (b)	G
Ethyl methacrylate ETM 14 O D/E III A Yes 2 .50-70(e)	G
2-Ethyl-3-propylacrolein EPA 19 ² O E III A Yes 1 No	G
Formaldehyde solution (37% to 50%) FMS 19 ² O D/E III A Yes 1 ^{.55-1(h)}	G
Furfural FFA 19 O D III A Yes 1 .55-1(h)	<u> </u>
Glutaraldehyde solution (50% or less) GTA 19 O NA III A No N/A No	<u> </u>
Hexamethylenediamine solution HMC 7 O E III A Yes 1 .55-1(c)	G
Hexamethyleneimine HMI 7 O C II A Yes 1 .56-1(b), (c)	G
Hydrocarbon 5-9 HFN O C III A Yes 1 .50-70(a), .50-81(a), (b)	G
ISONOPADE IPR 30 O A III A Yes 7 .50-70(a), 50-81(a), (b)	G



Dated: 23-Feb-11

Serial #: C1-1100494

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28170 Official #: 1231717

Page 3 of 8

Shipyard: Trinity Ashland City

Cargo Identificatio	n n							Condi	tions of Carriage	
	1	1				-	Vapor R			1
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd	VCS Category	Special Requirements in 46 CFR 151 General and Mat1s of	Insp. Period
Isoprene, Pentadiene mixture	IPN		0	В	III	Α	No	N/A	,50-70(a), .55-1(c)	G
Kraft pulping liquors (free alkall content 3% or more)(including: Black Green, or White liquor)	, KPL	5	0	NA	Ш	Α	No	N/A	.50-73, .66-1(a), (c), (g)	G
Mesityl oxide	MSO	18 ²	0	D	fII	Α	Yes	1	No	G
Methyl acrylate	MAM	14	0	С	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Methylcyclopentadiene dimer	MCK	30	0	С	111	Α	Yes	1	No	G
Methyl diethanolamine	MDE	8	0	Ε	[]]	Α	Yes	1	.56-1(b), (c)	G
2-Methyl-5-ethylpyridine	MEP	9	0	E	Ш	Α	Yes	1	,55-1(e)	G
Methyl methacrylate	MMM	14	0	С	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
2-Methylpyridine	MPR	9	0	D	111	Α	Yes	3	,55-1(c)	G
alpha-Methylstyrene	MSR	30	0	D	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Morpholine	MPL	7 2	0	D	181	Α	Yes	1	.55-1(c)	G
Nitroethane	NTE	42	0	D	11	Α	No	N/A	.50-81, .56-1(b)	а
1- or 2-Nitropropane	NPM	42	0	D	101	A	Yes	1	.50-81	G
1,3-Pentadlene	PDE	30	0	A	111	Α	Yes	7	.50-70(n), .50-81	G
Perchloroethylene	PER	36	0	NA		A	No	N/A	No	G
Polyethylene polyamines	PEB	7 2	0	E	- 111	A	Yes	1	.55-1(e)	G
Iso-Propanolamine	MPA	8	0	E	'''	A	Yes	1	.55-1(c)	G
	PAX	- 8	0	E	- 111	A	Yes	1	.56-1(b), (c)	G
Propanolamine (Iso-, n-)	IPP	7						5	,56-1(a)	
Iso-Propylamine			0	Α	- II	A	Yes		.55-1(e)	<u> </u>
Pyridine	PRD	9	0	С	111	Α	Yes	1		G
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxid			0		111	A	No	N/A	.50-73, .55-1(j)	G
Sodium aluminate solution (45% or less)	SAU	5	0	NA	111	A	No	N/A	,50-73, ,56-1(a), (b), (c)	
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA	- [[]	Α	No	N/A	.50-73	G
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA	111	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	III	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	 	Α	No	N/A	.50-73, .55-1(b)	<u>a</u>
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1,2	0	NA	II	Α	No	N/A	.50-73, .55-1(b)	G
Styrene (crude)	STX		0	D	Ш	Α	Yes	2	Να	G
Styrene monomer	STY	30	Q	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	Ш	A	No	N/A	No	G
Tetraethylenepentamine	TTP	7	0	E	111	Α	Yes	_ 1	.55-1(c)	G
Tetrahydrofuran	THE	41	0	С	H	Α	Yes	1	.50-70(b)	G
Toluenediamine	TDA	9	0	E	H	Α	No	N/A	.50-73, .56-1(a), (b), (c), (g)	G
1,2,4-Trichlorobenzene	тсв	36	0	Ε	Ш	Α	Yes	1	Na	G
1,1,2-Trichloroethane	TCM	36	0	NA	111	Α	Yes	1	.50-73, .56-1(a)	G
Trichloroethylene	TCL	36 ²	0	NA	111	Α	Yes	1	No	G
1,2,3-Trichloropropane	TCN	36	0	E	11	Α	Yes	3	.50-73, .56-1(a)	G
Triethanolamine	TEA	g 2	0	E	10	Α	Yes	1	.55-1(b)	G
Trlethylamine	TEN	7	0	С	11	A	Yes	3	,55-1(e)	G
Triethylenetetramine	TET	7 ²	0	E	III	Α	Yes	1	.55-1(b)	G
Triphenylborane (10% or less), caustic soda solution	TPB	5	0	NA	111	Α	No	N/A	.56-1(a), (b), (c)	G
Trisodium phosphate solution	TSP	5	0	NA	111	A	No	N/A	.50-73, ,56-1(a), (c).	G
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	III	Α	No	N/A	.56-1(b)	G
Vanillin black liquor (free alkall content, 3% or more).	VBL	5	0	NA		A	No	N/A	.50-73, .56-1(s), (c), (g)	G
Vinyl acetate	VAM	13	0	C	ш	A	Yes	2	.50-70(a), .50-81(a), (b)	G
Vinyl neodecanate	VND	13	o	E	101	A	No	N/A	.50-70(a), .50-81(a), (b)	G
VinyItoluene	VNT	13	0	D	III	A	Yes	2	.50-70(a), .50-81, .56-1(a), (b), (c), (G
VIII) TOTAL COLOR	****	10					199			

Serial #: C1-1

23-Feb-11

ted: 23-F



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28170

Official #: 1231717

Page 4 of 8

Shipyard: Trinity Ashland City

Cargo Identifica	ation							Condi	tions of Carriage	
								Recovery		T
Name	Chem	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
					.,,,,,		(,			7 61100
Subchapter D Cargoes Authorized for Vapor Co	ontrol									
Acetone	ACT	18 ²	D	С		Α	Yes	1		
Acetophenone	ACP	18	D	Ε		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	E		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-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, a their borate esters)	BFX and	20	D	E		Α	Yes	1		
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		
Butyl benzyl phthalate	BPH	34	D	E		Α	Yes	1		
Butyl toluene	BUE	32	D	D	-	Α	Yes	1		
Caprolactam solutions	CLS	22	D	Е		A	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		A	Yes	2		
p-Cymene	CMP	32	D	D		Α	Yes	1		
iso-Decaldehyde	IDA	19	D	E		Α	Yes	1		
n-Decaldehyde	DAL	19	D	E		Α	Yes	1		
Decene	DCE	30		D		A	Yes	1		
Decyl alcohol (all isomers)	DAX	20 ²	D	E		A	Yes	1		
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32		E		A	Yes	1		
Diacetone alcohol	DAA	20 2		D		A	Yes	1		
ortho-Dibutyl phthalate	DPA	34		E		A	Yes	1		
Diethylbenzene	DEB	32	D	D		Α	Yes	1		
Diethylene glycol	DEG	40 ²	D	E		A	Yes	1		
Diisobutylene	DBL	30		C		A	Yes	1		
Dilsobutyl ketone	DIK	18		D		A	Yes	1		
Diisopropylbenzene (all isomers)	DIX	32		E		A	Yes	1		
Dimethyl phthalate	DTL	34		E		A	Yes	1		
Dioctyl phthalate	DOP	34		E		A	Yes	1		
Dipentene	DPN	30				A	Yes	1		
Diphenyl	DIL	32		D/E		A	Yes	1		
Diphenyl, Diphenyl ether mixtures	DDO			=		A	Yes	1		
Diphenyl ether	DPE			E)		A	Yes	1		
Dipropylene glycol	DPG			, 		A	Yes	1		
Distillates: Flashed feed stocks	DFF		D 8			A	Yes	1		
Distillates: Straight run	DSR		D E			A	Yes	1		
Dodecene (all isomers)	DOZ		D [A	Yes	1		
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB		D E			A	Yes	1		
2-Ethoxyethyl acetate	EEA		D C				Yes	1		
Ethoxy triglycol (crude)	ETG		D E				Yes	1		
A - Gilma (manu)								•		



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28170 Official #: 1231717

Page 5 of 8

Shipyard: Trinity Ashland City

23-Feb-11

						1				
Cargo Identification	on			,				_	tions of Carriage	
Name	Chem Code	Compat Group No	Sub Chapte	Grade	Hull Type	Tank Group	App'd	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Ethyl acetate	ETA	34	D	С		Α	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		A	Yes	1		
Ethyl butanol	EBT	20	D	D		A	Yes	1		
Ethyl tert-butyl ether	EBE	41	D	С		A	Yes	11		
Ethyl butyrate	EBR	34	D	D		Α	Yes	1		
Ethyl cyclohexane	ECY	31	D	D		Α	Yes	1		
Ethylene glycol	EGL	20 ²	D	E		A	Yes	1		
Ethylene glycol butyl ether acetate	EMA	34	D	E		A	Yes	1		
Ethylene glycol diacetate	EGY	34	D	E		A	Yes	1		
Ethylene glycol phenyl ether	EPE	40	D	E		Α	Yes	1		
Ethyl-3-ethoxypropionate	EEP	34	D	D		Α	Yes	1		
2-Ethylhexanol	EHX	20	D	E		Α	Yes	1		
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		
Furfuryl alcohol	FAL	20 ²	D	Ε		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		A	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		A	Yes	2		
Heptyl acetate	HPE	34	D	E		Α	Yes	1		
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 2	D	B/C		Α	Yes	1		
Hexanolc acid	HXO	4	D	E		A	Yes	1		
Hexanol	HXN	20	D	D		Α	Yes	1		
Hexene (all isomers)	HEX	30	D	С		A	Yes	2		
Hexylene glycol	HXG	20	D	E		Α	Yes	1	•	
Isophorone	IPH	18 ²	D	E		Α	Yes	1		
Jet fuel; JP-4	JPF	33	D	Ē		A	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D I)		Α	Yes	1		
Kerosena	KRS	33	D I)		Α	Yes	1		
Methyl acetate	MTT	34	D I			Α	Yes	1	***	
Methyl alcohol	MAL	20 2	D (A	Yes	1		
Methylamyl acetate	MAC	34	D I)		A	Yes	1		
Methylamyl alcohol	MAA	20	D [)		A	Yes	1		
Methyl amyl ketone	MAK	18	D ()		Α	Yes	1		
Methyl tert-butyl ether	MBE	41 2	D (Α	Von	4		
			-			\sim	Yes	1		

^{***} This document is only valid when attached to, and referenced by a current, valid Certificate of Inspection. ***

Serial #: C1-1100494 23-Feb-11

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28170 Official #: 1231717

Page 6 of 8

Shipyard: Trinity Ashland City

Cargo Identificati	on							Condi	tions of Carriage	
		T						Recovery		T
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Methyl butyrate	MBU	34	D	С		Α	Yes	1		
Methyl ethyl ketone	MEK	18 ²	D	С		Α	Yes	1		
Methyl heptyl ketons	MHK	18	D	D		Α	Yes	1		
Methyl isobutyl ketone	MIK	18 ²	D	С		Α	Yes	1		
Methyl naphthalene (molten)	MNA	32	D	E		Α	Yes	1		
Mineral spirits	MNS	33	D	D		Α	Yes	1		
Myrcene	MRE	30	D	D		Α	Yes	1		
Naphtha: Heavy	NAG	33	D	#		Α	Yes	1		
Naphtha: Petroleum	PTN	33	D	#		Α	Yes	1		
Naphtha: Solvent	NSV	33	D	D		Α	Yes	1		
Naphtha: Stoddard solvent	NSS	33	D	D		Α.	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 ²	D	E		Α	Yes	1		
Nonyl phenol	NNP	21	D	E		Α	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	Е		Α	Yes	1		
Octane (all Isomers), see Alkanes (C6-C9)	OAX	31	D	С		Α	Yes	1		
Octanoic acid (all isomers)	OAY	4	D	Е		Α	Yes	1		
Octanol (all isomers)	осх	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		
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		
Oll, fuel: No. 6	OSX	33	D	E		Α	Yes	1		
Oll, misc: Crude	OIL	33	D	C/D		A	Yes	1		
Oil, misc; Diesel	ODS	33	D	D/E		A	Yes	1		
Oil, misc: Gas, high pour	OGP	33	D	E		A	Yes	1		
Oil, misc: Lubricating	QLB	33	D	E		A	Yes	1		
Oil, misc: Residual	ORL	33	D	E		A	Yes	1		
Oil, misc: Turbine	ОТВ	33	D	E		A	Yes	1		
Pentane (all isomers)	PTY	31	D	A		A	Yes	5		
Pentene (all isomers)	PTX	30		A		A	Yes	5		
n-Pentyl propionate	PPE	34		D		A	Yes	1		
alpha-Pinene	PIO	30	D	D		Α	Yes	1		
beta-Pinene	PIP	30		D		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40		 E		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34		E		A	Yes	1		
Polybutene	PLB	30		<u>-</u> Е		A	Yes	1		
Polypropylene glycol	PGC	40		Ē		A	Yes	1		
Iso-Propyl acetate	IAC	34		C		A	Yes	1		
n-Propyl acetate	PAT	34		c		A	Yes	1		
ise-Propyl alcohol	IPA	20 2		c		A	Yes	1		<u> </u>
n-Propyl alcohol	PAL	20 2		<u> </u>		A	Yes	1		
	PBY	32		D		A	Yes	1		
Propylbenzene (all isomers)	IPX	31		D		A	Yes	1		
Iso-Propylcyclohexane	PPG	20 2		<u>Б</u> Е		A	Yes	1		
Propylene glycol		ZU *	ا ر				168			

Dated:

23-Feb-11



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28170

Official #: 1231717

Page 7 of 8

Shipyard: Trinity Ashland City

Cargo Identificat	tion							Condi	tions of Carriage	
Name	Chem	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ts of	Insp. Period
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	Ë		Α	Yes	1		
Tetraethylene glycol	TTG	40	D	E		Α	Yes	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	Е		Α	Yes	1		
Triethylbenzene	TEB	32	D	E		Α	Yes	1		
Triethylene glycol	TEG	40	D	Ε		Α	Yes	1		
Triethyl phosphate	TPS	34	D	Е		Α	Yes	1		
Trimethylbenzene (all Isomers)	TRE	32	D	{D}		Α	Yes	1		
Trixylenyi phosphate	TRP	34	D	E		Α	Yes	1		
Undecene	UDC	30	D	D/E		Α	Yes	1		
1-Undecyl alcohol	UND	20	D	E		Α	Yes	1		
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		Α	Yes	1		



Serial #: C1-1100494

Dated:

23-Feb-11



Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 28170

Official #: 1231717

Page 8 of 8

Shipyard: Trinity Ashland

Hull #: 4774

Explanation of terms & symbols used in the Table:

Cargo Identification

Chem Code

Compatability Group No.

Note 1 Note 2 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. 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.

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, table 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 Chart. For additional compatibility Information, contact Commandant (CG-3PSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-0001. Telephone (202) 372-1425.

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

Subchapter Subchapter D Subchapter O Note 3

The subchapter in Title 46 Code of Federal Regulations under which the cargo has been classified.

Those flammable and combustible liquids listed in 46 CFR Table 30.25-1.

Those hazardous cargoes listed in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2.

Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges.

A, B, C

Grade

Note 4

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

carriage of that grade of cargo.

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

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

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.

Hull Type

NA

The required barge hull classification for carriage of the specified Subchapter O hazardous material cargo, see 46 CFR 151.10-1.

Designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of 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 Recovery 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 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 lcargo No: The vessel's VCS has been reviewed and is not approved by the MSC to control vapors of the specified cargo.

VCS Category:

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

Category 3

(Highly 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.

Category 4

(Polymerizes and highly toxic) Must comply with requirements of Categories 1, 2 and 3.

Category 5

(High vapor pressure) VCS pressure drop calculations for cargoes with a vapor pressure greater than 14.7 psia at 115 F must take into account increased vapor-air mixture densities and vapor growth rates as compared to Category 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This requirement is in addition to the requirements of Category 1.

Category 6 Category 7 (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.

none

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

Safety valve inspection report

Certificate nr

Date

775

06-14-2021

Job no.

LV-7294-WO

Client Barge # Kirby Inland Marine

Kirby 28170

Valve data

Set pressure (cold)

Manufacturer

Type / Model

Serial No.

125 psi

Farris 26QA10L-120

638869-10-A14

Size

6xQx8

Rating

150x150

Nozzle / Orifice

Test data

Set pressure test

Found set pressure

125 psi Reseat pressure (indication) 123 psi Passed

Result Test method

Air

Seat tightness test

Leakage

0 bubbles/min.

Test pressure

116 psi

Result

Passed

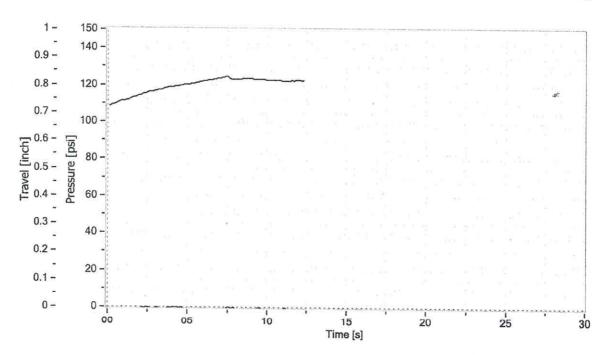
Backpressure test

Pressure Result

31 psi

Passed

Law Valve of Texas



Tested by Name Date

Signature

Javier Gutierrez

Inspected by Name Hope Borders Signature >

Pressure Curve TEST RESULTS FOR ERL 6" PV VALVE

Customer	Kirby Inland Marine
Barge Number	KIRBY-28170
Work Order	LV-8407-WO
Test date:	6/8/2021
Serial Number	2774K_2021

VALVE SETTINGS	PRESSURE	VACUUN
200000000000000000000000000000000000000	0.9	2.0

Opening Pr	Opening Pressure Test
Test Number	Valve Opening Pressure (PSI)
1	5.87
2	5.84
3	5.80
4	5.83
5	5.82
Average	5.83
Delta	0.076

	ng 6.00		4.00	3.00		2.00	1.00	5
Opening Pressure Test	Valve Opening Pressure (PSI)	5.87	5.84	5.80	5.83	5.82	5.83	0.076
Opening Pr	est Number		2	3	4	5	Average	Delta

Airflow PRESSURE Test

00

7

			2	00	100	120	140	160	180	700
AIRFLOW (CFM)	0	40	00	00	201					
Pressure	5.83	00'9	90.9	6.04	6.03	5.99	5.99	6.01	NO DATA	NO DATA
Differential from		,	,,,	0.04	0.20	0.16	0.16	0.18	NO DATA	NO DATA
		0.17	77.0	77.7	24.0					
Upening Point										

