

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

Certification Date: 31 Jan 2022 Expiration Date: 31 Jan 2027

## Certificate of Inspection

	1000000	Of	licial Number	BAC NUT	ber	Call Sign	Senice	
KIRBY 277	70	1:	233325				Tank B	arge
Helling Port			Hull Material	Hors	epower	Propulsion		
WILMINGT	ON, DE		Steel					RALLER
UNITED ST	TATES							
Place Built			Delivery Date	Keel Laid Cale	Gross Tons	Net Tons	DWT	Langth
ASHLAND	CITY, TN		12Aug2011		R-1632	R-1632		R-300.0
UNITED ST	TATES		12/1092011	003012011	l-	l-		140
				183 CH/	BY INLAND 50 Market S	I, TX 77530		
This vessel r	must be manne .ifeboatmen, 0	ed with the follo Certified Tanks	wing licensed	and unlicense Type Rating,	ed Personne and 0 GMD	I. Included in v SS Operators.	vhich there n	nust be
0 Masters		0 Licensed Mate		Engineers		)ilers	H-171 Y	
0 Chief Mat	tes	0 First Class Pile	ots 0 First	Assistant Engine	ers			
0 Second N	Aates	0 Radio Officers		nd Assistant Eng				
0 Third Mat		0 Able Seamen	THE PERSON NAMED IN COLUMN	Assistant Engine	ers			
Control / April 10 Property	irst Class Pilot t Class Pilots	Ordinary Sean     Deckhands		sed Engineers fied Member Eng	Ineer			
	this vessel may			The state of the s		ons in addition	to crew, and	no Others. Total
	mitted And Co	nditions Of O	peration:				011.5	ROTAN SETTE
	, Bays, and			l Coastwis	e			
	air weather o					between St.	Marks and	Carrabelle,
	has been ora						ssel must h	)(2). If this
ressel is o alt water thange in s	operated in sa intervals per status occurs	46 CFR 31.1	0-21(a)(1) a	nd the cogni	zant OCMI	notified in		soon as this
vessel is o salt water change in s This tank b	operated in so intervals per status occurs oarge is parti	cipating in	0-21(a)(1) a	nd the cogni	cant OCMI	notified in Tank Barge S		
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### **United States of America Department of Homeland Security United States Coast Guard**

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## Certificate of Inspection

Vessel Name: KIRBY 27770

(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

31Aug2031

31Jan2022

12Aug2011

Internal Structure

30Sep2026

31Jan2022

19Sep2016

### --- 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

27800

Barrel

Α

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	849	13.58
2 P/S	861	13.58
3 P/S	752	13.58

#### \*Loading Constraints - Stability\*

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
11	3862	10ft 0in	13.58	R, LBS, LC 0-12
Ш	4594	11ft 9in	13.58	R, LBS, LC 0-12

### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial # C1-1101570, dated 29 JUN 11, 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 greater than 0.5% benzene, the person in charge is responsible for ensuring the provisions of 46 CFR 197, Subpart C, are applied.

Thermal fluid heater may only be operated when carrying grade "E" cargoes.

### \*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 # C1-1101570, dated 24 May, 2011, and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

Per 46 CFR 39.1017 and 39.5000(e), this vessel's VCS has been evaluated and approved for multi-breasted tandem loading with other vessels specifically approved to tandem load with this vessel.



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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 13.58 lbs/gal, may be carried as slack loads, but shall not exceed the tank weight limits as listed above.

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.

### --- Inspection Status ---

*Fuel	Tanks*
I uci	I alling

Internal Examinations

Tank ID

Previous

Last

Next

Machinery deck

12Aug2011

### \*Cargo Tanke\*

*Cargo Tanks*						
	Internal Exam			External Exam	Ì	
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	12Aug2011	31Jan2022	31Aug2031	-	-	_
2 P/S	12Aug2011	31Jan2022	31Aug2031	-	-	-
3 P/S	12Aug2011	31Jan2022	31Aug2031	37	-	-
			Hydro Test			
Tank Id	Safety Valves		Previous	Last	Next	
1 P/S	-		-	12Aug2011	•	
2 P/S	-		-	12Aug2011	-	
3 P/S	-		-	12Aug2011	<u>a</u> r	
*Boilers/Steam Piping*						
	Hydro Inspect	ion		Mountings Insp	pection	
Boiler/Piping ID	Previous	Last	Next	Opened	Removed	
800SB-1106-1519	-	12Aug2011	-	-	-	

12Aug2011

31Jan2022

Fireside Inspection

Waterside Inspection

Boiler/Piping ID 800SB-1106-1519 Previous 19Sep2016 Last

Next

31Jan2027

Previous

Last

Next

### --- Conditional Portable Fire Extinguisher Requirements---

Required Only During Transfer of Cargo or Operation of Barge Machinery

### --- Fire Fighting Equipment ---

### \*Fire Extinguishers - Hand portable and semi-portable\*

Quantity

Class Type

3

40-B

\*\*\*END\*\*\*



### Cargo Authority Attachment

Vessel Name: KIRBY 27770

Official #: 1233325

Shipyard: TRINITY ASHLAND

Dated:

Serial #: C1-1101570

29-Jun-11

CITY

Hull #: 4786

81(a), .50-81(b),

Tank Group Information	Cargo Identification			Caroo	Tanks		Cargo Transfer		Environmental Control		Fire	Special Requirements					
Tnk Grp Tanks in Group	Density	Density Press. Temp. Cargo Seg Typ Tank Type 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.	Elev	II	1ii 2ii	Integral Gravity	PV	Closed	II	G-1	NR	NA	Portable	40-1(f)(1), .50-60, .50-70(a), .50-70(b), .50-73, .50-	55-1(h), (j), 56-1(a), (c), (d), (e), (f), (g),	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.

#### List of Authorized Cargoes

Cargo Identificatio	n					Conditions of Carriage					
							Vapor Re			1	
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	111	Α	Yes	3	No	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, .50-86	G	
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	11	Α	No	N/A	No	G	
Benzene	BNZ	32	0	С	111	Α	Yes	1	.50-60	G	
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 <sup>2</sup>	0	С	III	Α	Yes	1	.50-60	G	
Benzene, Toluene, Xylene mixtures (10% Benzene or more)	BTX	32	0	B/C	Ш	Α	Yes	1	.50-60	G	
Butyl acrylate (all isomers)	BAR	14	0	D	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Butyl methacrylate	вмн	14	0	D	111	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	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 <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	III	Α	No	N/A	.50-73, .55-1(j)	G	
Chemical Oil (refined, containing phenolics)	COD	21	0	E	11	Α	No	N/A	.50-73	G	
Chlorobenzene	CRB	36	0	D	111	Α	Yes	1	No	G	
Chloroform	CRF	36	0	NA	111	Α	Yes	3	No	G	
Coal tar naphtha solvent	NCT	33	0	D	Ш	Α	Yes	1	.50-73	G	
Coal tar pitch (molten)	СТР	33	0	E	III	Α	No	N/A	.50-73	G	
Creosote	CCM	/ 21 <sup>2</sup>	0	Е	111	Α	Yes	1	No	G	
Cresols (all isomers)	CRS	21	0	Е	Ш	Α	Yes	1	No	G	
Crotonaldehyde	CTA	19 <sup>2</sup>	0	С	li.	Α	Yes	4	.55-1(h)	G	
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG		0	С	111	Α	No	N/A	No	G	
1,1-Dichloroethane	DCH	36	0	С	III	Α	Yes	1	No	G	
Dichloromethane	DCM	36	0	NA	111	Α	Yes	5	No	G	
1,1-Dichloropropane	DPB	36	0	С	Ш	Α	Yes	3	No	G	
1,2-Dichloropropane	DPP	36	0	С	111	Α	Yes	3	No	G	
1,3-Dichloropropane	DPC	36	0	С	111	Α	Yes	3	No	G	
1,3-Dichloropropene	DPU	15	0	D	II	Α	Yes	4	No	G	
Dichloropropene, Dichloropropane mixtures	DMX	. 15	0	С	11	Α	Yes	1	No	G	
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	II	Α	No	N/A	No	G	
EE Glycol Ether Mixture	EEG	40	0	D	111	Α	No	N/A	No	G	

<sup>2.</sup> 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.

<sup>3.</sup> 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.



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Shipyard: TRINITY ASHLAND

C1-1101570

29-Jun-11

CITY

Hull #: 4786

Official #: 1233325

Page 2 of 7

Cargo Identification	1					Conditions of Carriage					
*							Vapor Re	covery		T	
Ethyl acrylate Name	Chem Code EAC	Compat Group No 14	Sub Chapter O	Grade C	Hull Type III	Tank Group A	App'd (Y or N) ( Yes	VCS Category 2	Special Requirements in 46 CFR 151 General and Mat'ls of .50-70(a), .50-81(a), (b)	Insp Peri G	
Ethylene cyanohydrin	ETC	20	0	E	III	Α	Yes	1	No	G	
Ethylene dichloride	EDC	36 <sup>2</sup>	0	С	III	Α	Yes	1	No	G	
Ethylene glycol hexyl ether	EGH	40	0	E	Ш	Α	No	N/A	No	G	
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	111	A	Yes	1	No	G	
Ethylene glycol propyl ether	EGP	40	0	E	III	Α	Yes	1	No	G	
2-Ethylhexyl acrylate	EAI	14	0	E	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G	
Ethyl methacrylate	ETM	14	0	D/E	III	A	Yes	2	.50-70(a)	G	
2-Ethyl-3-propylacrolein	EPA	19 <sup>2</sup>	0	E	III	Α	Yes	1	No	G	
Formaldehyde solution (37% to 50%)	FMS	19 <sup>2</sup>	0	D/E	III	A	Yes	1	.55-1(h)	G	
Furfural	FFA	19	0	D	111	A	Yes	1	.55-1(h)	G	
Glutaraldehyde solution (50% or less)	GTA	19	0	NA	111	A	No	N/A	No	G	
Hydrocarbon 5-9	HFN		0	C	III	A	Yes	1	.50-70(a), .50-81(a), (b)	G	
Isoprene	IPR	30	0	A	III	A	Yes	7	.50-70(a), .50-81(a), (b)	G	
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	III	Α	Yes	1	No	G	
Methyl acrylate	MAM	14	0	C	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G	
Methylcyclopentadiene dimer	MCK	30	0	c	111		Yes	1	No	G	
Methyl methacrylate	MMM	14	0	C	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G	
alpha-Methylstyrene	MSR	30	0			A	Yes	2	.50-70(a), .50-81(a), (b)	G	
1- or 2-Nitropropane	NPM	42	0	D	111	A			.50-81		
1,3-Pentadiene	PDE	30	0	A	111	A	Yes	1	.50-70(a), .50-81	G	
Perchloroethylene	PER	36	0	NA NA	100000	-	Yes	7		G	
Phthalic anhydride (molten)	PAN	11	0	E	- 111	A	No	N/A	No	G	
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide		11	-0		- 111	A	Yes	1	.50-73, .55-1(j)	G	
Sodium chlorate solution (50% or less)	SDD	0 1,2		NIA	111	A	No	N/A	.50-73	G	
Styrene (crude)	STX	0	0	NA D	111	A	No	N/A		G	
Styrene monomer	STY	30	0		- 111	Α	Yes	2	No 50 70(-) 50 04(-) (1)	G	
1,1,2,2-Tetrachloroethane	TEC	36	0	D	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G	
Tetrahydrofuran	THF	41		NA O	- 111	A	No	N/A	No So Zou	G	
1,2,4-Trichlorobenzene	TCB	36	0	С	111	A	Yes	1	.50-70(b)	G	
1,1,2-Trichloroethane	TCM		170	E	111	Α .	Yes	1	No 50.73 50.44 )	G	
Trichloroethylene	TCL	36 36 <sup>2</sup>	0	NA	111	A	Yes	1	.50-73, .56-1(a)	G	
1,2,3-Trichloropropane	TCN		0	NA	111	Α	Yes	1	No 50.72 50.44	G	
Frisodium phosphate solution	TSP	36		E	11	A	Yes	3	.50-73, .56-1(a)	G	
Vanillin black liquor (free alkali content, 3% or more).	-	5	0	NA	- 111	A	No	N/A	.50-73, .56-1(a), (c).	G	
Vinyl acetate	VBL	5	0	NA	111	A	No	N/A	.50-73, .56-1(a), (c), (g)	G	
Vinyl neodecanate	VAM	13	0	С	- 111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
	VND	13	0	E	: []]	Α	No	N/A	.50-70(a), .50-81(a), (b)	G	
ubchapter D Cargoes Authorized for Vapor Contro	ol								9		
Acetone	ACT	18 <sup>2</sup>	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	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		-	



Dated: 29-Jun-11

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Shipyard: TRINITY ASHLAND

CITY

Hull #: 4786

Official #: 1233325

Page 3 of 7

Cargo Identificatio	n							Condi	tions of Carriage	
Name Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	Chem Code BFX	Compat Group No 20	Sub Chapter D	Grade E	Hull Type	Tank Group A	App'd	VCS Category 1	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
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		A	Yes	1		
Butyl alcohol (sec-)	BAS	20 <sup>2</sup>	D	С		A	Yes	1		
Butyl alcohol (tert-)	BAT		D	c		A	Yes	1		
Butyl benzyl phthalate	BPH	34	D	E		A	Yes	1		
Butyl toluene	BUE	32	D	D		A	Yes	1		
Caprolactam solutions	CLS	22	D	E		A	Yes	1	The second secon	
Cyclohexane	CHX	31	D	C		A	Yes	1		
Cyclohexanol	CHN	20	D	E		A	Yes			
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		A	Yes	2		
p-Cymene	CMP	32	D	D		A	Yes	1		
iso-Decaldehyde	IDA	19	D	E		A	Yes	1		
n-Decaldehyde	DAL	19	D	E		A	Yes	1		
Decene	DCE	30	D	D			Yes	1		
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>	D	E						
	DBZ	32	D	 E		A	Yes	1		
n-Decylbenzene, see Alkyl(C9+)benzenes  Diacetone alcohol	DAA	20 <sup>2</sup>	D	D			Yes	1		
	DPA		D			A	Yes	1		
ortho-Dibutyl phthalate		34		E		A	Yes	1		
Diethylbenzene Diethylbenzene	DEB	32	D	D		A	Yes	1		
Diethylene glycol	DEG	40 2	D	E		A	Yes	1		
Diisobutylene	DBL	30	D	С		Α .	Yes	1		
Diisobutyl ketone	DIK	18	D	D	<del>//</del>	A	Yes	1		
Diisopropylbenzene (all isomers)	DIX	32	D	E		Α	Yes	1		
Dimethyl phthalate	DTL	34	D	E		Α	Yes	1		
Dioctyl phthalate	DOP	34	D	E		Α	Yes	1		
Dipentene	DPN	30	D	D		Α	Yes	1		
Diphenyl	DIL	32	D	D/E		Α	Yes	1		
Diphenyl, Diphenyl ether mixtures	DDO	33	D	E		Α	Yes	1		
Diphenyl ether	DPE	41	D	{E}		Α	Yes	1		
Dipropylene glycol	DPG	40	D	E		Α	Yes	1		
Distillates: Flashed feed stocks	DFF	33	D	E		Α	Yes	11		
Distillates: Straight run	DSR	33	D	E		Α	Yes	1		
Dodecene (all isomers)	DOZ	30	D	D		Α	Yes	1		
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	E		Α	Yes	1		
2-Ethoxyethyl acetate	EEA	34	D	D		_ A	Yes	1		
Ethoxy triglycol (crude)	ETG	40	D	E		Α	Yes	1		
Ethyl acetate	ETA	34	D	С		Α	Yes	1		
Ethyl acetoacetate	EAA	34	D	E		Α	Yes	1		
Ethyl alcohol	EAL	20 <sup>2</sup>	D	С		Α	Yes	1		
Ethylbenzene	ETB	32	D	С		Α	Yes	1	p p	
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 <sup>2</sup>	D	E		Α	Yes	1		



### Cargo Authority Attachment

Vessel Name: KIRBY 27770

Official #: 1233325

Page 4 of 7

Shipyard: TRINITY ASHLAND

29-Jun-11

CITY

Hull #: 4786

Cargo Identification	on					Conditions of Carriage				
			239,2000					Recovery		
Name	Chem	Group No	Sub	Grade	Hull Type	Tank	App'd (Y or N)	VCS	Special Requirements in 46 CFR	Insp.
Ethylene glycol butyl ether acetate	EMA	34	D	E	IVDE	A	Yes	1	151 General and Mat'ls of	Perior
Ethylene glycol diacetate	EGY	34	D	E		Α	Yes	1		
Ethylene glycol phenyl ether	EPE	40	D	Ε		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 <sup>2</sup>	D	E	Ulado e a esca	Α	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)	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		3
Glycerine	GCR	20 <sup>2</sup>	D	E		Α	Yes	1		
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		A	Yes	1		
Heptanoic acid	HEP	4	D	E		A	Yes	1		
Heptanol (all isomers)	HTX	20	D	D/E		A	Yes	1		
Heptene (all isomers)	HPX	30	D	С		A	Yes	2		
Heptyl acetate	HPE	34	D	Ē		A	Yes	1		
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	D	B/C		A	Yes	1		
Hexanoic acid	HXO	4	D	E		A	Yes	1		
Hexanol	HXN	20	D	D		A	Yes	1		
Hexene (all isomers)	HEX	30	D	C		A	Yes	2		
Hexylene glycol	HXG	20	D	E		A	Yes	1		
Isophorone	IPH	18 <sup>2</sup>	D	E		A	Yes	1		
Jet fuel: JP-4	JPF	33	D	 E		A	Yes	1		
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		A	Yes	1		
Kerosene	KRS	33	D	D			Yes	1		
Methyl acetate	MTT	34	D	D		A	Yes	1		
Methyl alcohol	MAL	20 2	D	С			Yes	1		
Methylamyl acetate	MAC	34	D	D		A	Yes	1		
Methylamyl alcohol	MAA	20	D	D						
Methyl amyl ketone	MAK	18	D	D		A	Yes	1		
Methyl tert-butyl ether	MBE	41 2	D	С		A	Yes			
Methyl butyl ketone	MBK	18	D	C		A	Yes	1		
Methyl butyrate	MBU	34	D	С		A	Yes	1		
Methyl ethyl ketone	MEK	18 <sup>2</sup>	D	c		A	Yes	1		
Methyl heptyl ketone	MHK	18	D	D			030000			
Methyl isobutyl ketone	MIK	18 <sup>2</sup>	D	С		<u>A</u>	Yes	1		
Methyl naphthalene (molten)	MNA	32	D	E		A	Yes	1		
Mineral spirits	MNS	33	D D	D		A	Yes	1		
Myrcene	MRE	30	D	12/00/2	-	Α	Yes	1		
	NAG	33	D	D #	200	A	Yes	1		
Naphtha: Heavy Naphtha: Petroleum	PTN	33	D	#		A A	Yes Yes	1		



Serial #: C1-1101570 Dated: 29-Jun-11

## Certificate of Inspection

### Cargo Authority Attachment

Vessel Name: KIRBY 27770

Shipyard: TRINITY ASHLAND

CITY

Hull #: 4786

Official #: 1233325

Page 5 of 7

Cargo Identification	n							Condi	tions of Carriage	
								Recovery		
Name Naphtha: Solvent	Chem Code NSV	Compat Group No 33	Sub Chapter D	Grade D	Hull Type	Tank Group A	App'd (Y or N) Yes	VCS	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
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		A	Yes	2		
Nonyl alcohol (all isomers)	NNS	20 <sup>2</sup>	D	E		A	Yes	1		
Nonyl phenol	NNP	21	D	E		A	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	E		Α	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	С		A	Yes	1		
Octanoic acid (all isomers)	OAY	4	D	E		Α	Yes	1		
Octanol (all isomers)	OCX	20 <sup>2</sup>	D	E		A	Yes	1		
Octene (all isomers)	OTX	30	D	c		A	Yes	2		
Oil, fuel: No. 2	OTW	33	D	D/E		A	Yes	1		
Oil, fuel: No. 2-D	OTD	33	D	D		A	Yes	1		
Oil, fuel: No. 4	OFR	33	D	D/E		A	Yes	1		
Oil, fuel: No. 5	OFV	33	D	D/E		A	Yes	1		
Oil, fuel: No. 6	OSX	33		E		A	Yes	1		
Oil, misc: Crude	OIL	33		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	OLB	33	D	E		A	Yes	1		
Oil, misc: Residual	ORL	33	D	 E		A	Yes	1		
Oil, misc. Turbine	ОТВ	33		 E		A	Yes	1		
Pentene (all isomers)	PTX	30	D	Α		A .	Yes	5		
n-Pentyl propionate	PPE	34		D		A	Yes	1		
alpha-Pinene	PIO	30	D	D		A	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			Yes	1		
	PLB	30	D	E		A	Yes	1		
Polystene Polystene chical	PGC	40	D	E		A	Yes	1		
Polypropylene glycol	IAC	34	D	C			Yes	1		
iso-Propyl acetate	PAT	34	D	C			Yes	1		
n-Propyl acetate	IPA	20 2		c			Yes	1		
iso-Propyl alcohol	PAL	20 2		C		A	Yes	1		
n-Propyl alcohol	PBY	32	D	D		A	Yes	1		
Propylbenzene (all isomers)	IPX	31	D	D		A	Yes	1		
iso-Propylcyclohexane	PPG	20 2		E		A	Yes	1		
Propylene glycol	PGN	34	D	D		A				
Propylene glycol methyl ether acetate	PGN	30		D		A	Yes	1		
Propylene tetramer	SFL	39	D	E		A	Yes	1		
Sulfolane		40	D	E		11.07.0	V-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	1		
Tetraethylene glycol	TTG					A	Yes			
Tetrahydronaphthalene	THN	32	D	E		Α	Yes	1		
Toluene	TOL	32	D	C		A	Yes	1		
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	E		A	Yes	1		
Triethylbenzene	TEB	32	D	E		Α	Yes	1		
Triethylene glycol	TEG	40	D	E		Α .	Yes	1		
Triethyl phosphate	TPS	34	D	E		Α	Yes	1		





Serial #: C1-1101570

29-Jun-11

# Certificate of Inspection

Page 6 of 7

Cargo Authority Attachment

Vessel Name: KIRBY 27770

Shipyard: TRINITY ASHLAND

CITY

Hull #: 4786

Official #: 1233325

Cargo Identification								Conditions of Carriage					
	Chem	Compat Group No 32		Grade {D}			Vapor Recovery			T			
Name Trimethylbenzene (all isomers)					Hull Type	Group O	(Y or N) Yes	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period			
Trixylenyl phosphate	TRP	34	D	E		Α	Yes	1					
Undecene	UDC	30	D	D/E		A	Yes	1					
1-Undecyl alcohol	UND	20	D	E	***	A	Yes	1					
Xylenes (ortho-, meta-, para-)	XLX	32	D	D		A	Yes	1					





Cargo Authority Attachment

Page 7 of 7

Shipyard: TRINITY ASHL

C1-1101570

29-Jun-11

Hull #: 4786

Serial #

### Explanation of terms & symbols used in the Table:

Cargo Identification

Chem Code

none

Compatability Group No.

Vessel Name: KIRBY 27770

Official #: 1233325

Note 1

Note 2

Subchapter

Subchapter O

Grade

A, B, C

Note 4

Hull Type

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 (CHRS) 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 compability requirements of 46 CFR Part 150 are met. Cargoes must be checked for 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 Chart. For additional compatibility information, contact Commandant (CG-3PSO-3), U.S. Coast Guard, 2100 Second Street, SW, Washington, DC 20593-

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

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

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/combustbility 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 the cargo. See 46 CFR 151.10-1(b)(3). Designed to carry products of sufficient hazard to require a moderate degree of control. See 46 CFR 151.10-1(b)(4).

Not applicable to barges certificated under Subchapter D

#### Conditions of Carriage

Tank Group 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.

(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 39.20-11) and the pressure drop calculations (46 CFR 39.30-16)) must use appropriate friction factors, vapor densities and vapor growth rates.

(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

Category 2

(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 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

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