

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

Certification Date: 28 Sep 2021 Expiration Date: 28 Sep 2026

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.

Vessel Name		Official Number	IMO Nu	mber	Call Sign	Service	
KIRBY 27780		1232600				Tank E	Barge
Hailing Port		Hull Material	но	rsepower	Propulsion	the continued of the co	
WILMINGTON, DE		Steel					
UNITED STATES							
Place Built		Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
ASHLAND CITY, TN		29Jun2011	25Apr2011	R-1632	R-1632 F		R-300.0 H0
UNITED STATES					•		
Owner			Oper	F681	MADINE LD		
KIRBY INLAND MARINE L 55 WAUGH DR STE 1000	Р		183	RBY INLAND 350 Market S annelview, TO			
HOUSTON, TX 77007 UNITED STATES				IITED STATE			
This vessel must be manne 0 Certified Lifeboatmen, 0 (d with the fo Certified Tan	llowing licensed	and unlicens	sed Personne , and 0 GMD	I. Included in v	vhich there π	nust be
0 Masters	0 Licensed Ma		Engineers		Dilers		
0 Chief Mates	0 First Class I	Pilots 0 First	Assistant Engin	eers			
0 Second Mates	0 Radio Office	ers 0 Seco	nd Assistant Er	gineers			
0 Third Mates	0 Able Seame	en 0 Third	Assistant Engi	neers			
0 Master First Class Pilot	0 Ordinary Se	amen 0 Licer	nsed Engineers				
0 Mate First Class Pilots	0 Deckhands		ified Member Er				
In addition, this vessel may Persons allowed: 0	carry 0 Pass	sengers, 0 Othe	r Persons in	crew, 0 Perso	ons in addition	to crew, and	no Others. Total
Route Permitted And Co	nditions Of	Operation:	W				
Lakes, Bays, and	Sounds	plus Limite	d Coastw	se			
LIMITED COASTWISE SERVICE VISIBILITY, NOT MORE THE	CE; IN SEAS AN TWELVE (OF LESS THAN 12) MILES FROM	THREE (03) SHORE BETV	FEET, WIND NEEN ST. MAR	LESS THAN TWE KS AND CARRAE	NTY (20) KN ELLE, FLORI	OTS AND CLEAR
THIS TANK BARGE IS PART: PROGRAM (TBSIP). INSPECTACTION PLAN (TAP). INSPECTX.	TION ACTIVI	TIES ABOARD TH	HIS BARGE SH	HALL BE COND	UCTED IN ACCO	RDANCE WITH	I ITS TANK BARGE
THIS VESSEL HAS BEEN GR	ANTED A FRE	SH WATER SERV	ICE EXAMINA	TION INTERVA	L IN ACCORDAN	ICE WITH 46	CFR TABLE
***SEE NEXT PAGE FO	R ADDITIO	NAL CERTIFI	CATE INFO	RMATION**	•		
With this Inspection for Cer Inspection, Houma, Louisia	ina certified t	the vessel, in all	leted at Hour respects, is	na, LA, UNIT in conformity	ED STATES, twith the application	he Officer in able vessel ir	Charge, Marine espection laws and
the rules and regulations pr	eriodic/Re-In	spection		This certifica	sterissued by		
Date Zone	A/P/R	00 miles (25)	ure	MM	SPOLARICH	EDR USCG	, By Direction
8-18-22 HOUSTON		Byben M		Officer In Charge, I	5.0)
8-12-2024 Ratio Ray	100 A	Cath	- Carlo	Inconcilor Zone	Houm	a, Louisiana	

Dept. of Home Sec., USCG, CG-841 (Rev 4-2000)(v2)

OMB No. 2115-0517



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

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Vessel Name: KIRBY 27780

31.10-21(b); IF THIS VESSEL IS OPERATED IN SALT WATER MORE THAN SIX (6) MONTHS IN ANY TWELVE (12) MONTH PERIOD, THE VESSEL MUST BE INSPECTED USING SALT WATER INTERVALS PER 46 CFR TABLE 31.10-21(a) AND THE COGNIZANT OCMI NOTIFIED IN WRITING AS SOON AS THIS CHANGE IN STATUS OCCURS.

---Hull Exams---

 Exam Type
 Next Exam
 Last Exam
 Prior Exam

 DryDock
 31Aug2031
 02Aug2021
 29Jun2011

 Internal Structure
 31Aug2026
 02Aug2021
 15Jul2016

--- 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 Barrels A Yes No No

Hazardous Bulk Solids Authority

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
III	4594	11ft 9in	13.58	R, LBS, LC 0-12
II	3862	10ft 0in	13.58	R, LBS, LC 0-12

Conditions Of Carriage

THERMAL FLUID HEATER MAY ONLY BE OPERATED WHEN CARRYING GRADE "E" CARGOES.

ONLY THOSE HAZARDOUS CARGOES NAMED IN THE VESSEL'S CARGO AUTHORITY ATTACHMENT, SERIAL NO. #C1-1101570 DATED 29 JUN 2011, MAY BE CARRIED AND THEN ONLY IN THE TANKS INDICATED.

PER 46 CFR 150.130, THE PERSON IN CHARGE OF THE BARGE IS RESPONSIBLE FOR ENSURING THAT THE COMPATIBILITY REQUIREMENTS OF 46 CFR 150 ARE MET. CARGOES MUST BE CHECKED FOR COMPATIBILITY USING THE FIGURES, TABLES, AND APPENDICES OF 46 CFR 150 IN CONJUNCTION WITH THE COMPATABILITY GROUP NUMBERS FROM THE "COMPAT GRP" COLUMN LISTED ABOVE IN THE "SPECIFIED HAZARDOUS CARGO AUTHORITY" SECTION.

PER 46 CFR 151.10-15(c)(2) THE MAX TANK WEIGHTS LISTED BELOW REFLECT UNIFORM (WITHIN 5%) LOADING AT THE DEEPEST DRAFT ALLOWED. WHEN CARRYING SUBCHAPER "O" CARGOES AT SHALLOWER DRAFTS, THE BARGE(S) SHOULD ALWAYS BE LOADED UNIFORMLY, WITHIN 5%.

WHEN THE VESSEL IS CARRYING CARGOES CONTAINING GREATER THAN 0.5% BENZENE, THE PERSON IN CHARGE IS RESPONSIBLE FOR ENSURING THE PROVISIONS OF 46 U.S. CODE OF FEDERAL REGUALTIONS PART 197, SUBPART C ARE APPLIED.

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.

IN ACCORDANCE WITH 46 CFR PART 39, EXCLUDING PART 39.4000 AND 39.5000, THIS VESSEL'S VAPOR



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CONTROL SYSTEM HAS BEEN INSPECTED TO THE PLANS APPROVED BY MARINE SAFETY CENTER LETTER SERIAL NO. #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

IN ACCORDANCE WITH 46 CFR PART 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 VESSEL.

Next

--- Inspection Status ---

Fuel Tanks

Internal Examinations

Tank ID Previous Last

Mechinery deck - 29Jun2011

Cargo Tanks

	Internal Exam			External Exan	n	
Tank ld	Previous	Last	Next	Previous	Last	Next
1 P/S	=	02Aug2021	31Aug2031	-	-	_
2 P/S	=	02Aug2021	31Aug2031	-	-	-
3 P/S	-	02Aug2021	31Aug2031	-	-	-
			Hydro Test			
Tank Id	Safety Valves		Previous	Last	Next	
1 P/S	-		-	_	-	
2 P/S	-		-	-	-	
3 P/S	-		-	-,	-	

Safety Valves

Serial Number Location Bench Test Last Next sa79224 Aft machinery deck 07Apr2011 15Jul2016 15Jul2021

--- 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



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

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 27780

Shipyard: TRINITY ASHLAND

CITY

Hull #: 4780

Official #: 1232600

Tank Group Information	on Cargo Identification Tanks			Cargo Transfer	Environmental Control		Fire	Special Requirements							
Trik Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Seg Tank	Type	Vent	Gauge	Pipe Class Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Tem

A #1P/S, #2P/S, #3P/S

13.6 Atmos. Elev

Integral

Portable

40-1(f)(1), .50-60, .50-70(a), .50-70(b), .50-73, .50-81(a), .50-81(b),

- 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			Conditions of Carriage							
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor Re App'd (Y or N)	VCS Category	Special Requirements in 45 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	111	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	А	Yes	1	.50-60	G
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 2	0	С	Ш	Α	Yes	1	.50-60	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	вмн	14	0	D	HI	Α	Yes	2	.50-70(a), .50-B1(a). (b)	G
Butyraldehyde (all isomers)	BAE	19	0	С	111	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	Na	G
Caustic potash solution	CPS	5 ²	0	NA	Ш	Α	No	N/A	.50-73, .55-1()	G
Caustic soda solution	CSS	5 ²	0	NA	Ш	Α	No	N/A	.50-73, .55-1()	G
Chemical Oil (refined, containing phenolics)	COD	21	0	E	11	Α	No	N/A	.50-73	G
Chlorobenzene	CRB	36	0	D	Ш	Α	Yes	1	Na	G
Chloroform	CRF	36	0	NA	III	Α	Yes	3	No	G
Coal tar naphtha solvent	NCT	33	0	D	111	Α	Yes	1	.50-73	G
Coal tar pitch (molten)	CTP	33	0	E	111	Α	No	N/A	.50-73	G
Creosote	CCV	/ 21 2	0	E	111	Α	Yes	1	No	G
Cresols (all isomers)	CRS	21	0	E	III	Α	Yes	1	No	G
Crotonaldehyde	CTA	19 2	0	С	П	Α	Yes	4	.55-1(h)	G
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG	i	0	С	111	Α	No	N/A	No	G
1,1-Dichloroethane	DCH	36	0	С	111	Α	Yes	1	No	G
Dichloromethane	DCN	1 36	0	NA	111	Α	Yes	5	No	G
1,1-Dichloropropane	DPB	36	0	С	111	Α	Yes	3	Na	G
1,2-Dichloropropane	DPP	36	0	С	111	Α	Yes	3	No	G
1,3-Dichloropropane	DPC	36	0	С	Ш	Α	Yes	3	No	G
1,3-Dichloropropene	DPL	15	0	D	II	Α	Yes	5 4	No	G
Dichloropropene, Dichloropropane mixtures	DMX	(15	0	С	- 11	Α	Yes	1	No	G
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	11	Α	No	N/A	4 но	G
EE Glycol Ether Mixture	EEG	40	0	D	111	Α	No	N/A	∆ No	G

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.



Cargo Authority Attachment

Vessel Name: KIRBY 27780
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Shipyard: TRINITY ASHLAND

Serial #: C1-1101570

29-Jun-11

CITY

Hull #: 4780

Cargo Identification	1					Conditions of Carriage						
Name	Chem Code EAC	Compat Group No:	Sub Chapter O	Grade C	Hull Type	Tank Group A	Vapor Re App'd	VCS	Special Requirements in 46 CFR 151 General and Mat'ts of .50-70(a), .50-81(a), (b)	Insp. Perio		
Ethylene cyanohydrin	ETC	20		E	111	A	Yes	1	No	G		
Ethylene dichloride	EDC	36 ²	- 0	c	111	A	Yes	1	No	G		
Ethylene glycol hexyl ether	EGH	40	0	E	<u> </u>	A	No	N/A	No			
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	111	A	Yes	1	No	G		
Ethylene glycol propyl ether	EGP	40	0	E	— <u>III</u>	A	Yes	_	No	G		
2-Ethylhexyl acrylate	EAI	14	-0	E	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G		
Ethyl methacrylate	ETM	14	0	D/E		A	Yes	2	.50-70(a)	G		
2-Ethyl-3-propylacrolein	EPA	19 2	0	E	111	A	Yes	1	No	G		
Formaldehyde solution (37% to 50%)	FMS	19 2	0	D/E	III	A	Yes	1	.55-1(h)	G		
Furfural	FFA	19	0	D		 A	Yes	<u>-</u> _	.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	111	<u>A</u>	Yes	1	.50-70(a), .50-81(a), (b)	G		
soprene	IPR	30	-0		111	$\frac{1}{A}$	Yes	7	.50-70(a), .50-81(a), (b)	G		
Araft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	KPL	5	0	NA	III	A	No	N/A	.50-73, .56-1(a), (c), (g)	G		
Mesityl oxide	MSO	18 2	0	D	111	A	Yes	1	No	G		
Methyl acrylate	MAM	14	0	С	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G		
Methylcyclopentadiene dimer	MCK	30	0	С	111	A	Yes	1	No	G		
Methyl methacrylate	MMN		0	С	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G		
alpha-Methylstyrene	MSR		0	D	111	A	Yes	2	.50-70(a), .50-81(a), (b)	G		
I- or 2-Nitropropane	NPM		0	D	111	A	Yes	1	.50-81	G		
1,3-Pentadiene	PDE	30	0	Α	111	A	Yes	7	.50-70(a), .50-81	G		
Perchloroethylene	PER	36	0	NA	111	A	No	N/A	No	G		
Phthalic anhydride (molten)	PAN	11	0	Ē	111	Α	Yes	1	No	G		
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxid	e) SAP		0		III	A	No	N/A	.50-73, .55-1(j)	G		
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA	III	A	No	N/A	.50-73	G		
Styrene (crude)	STX		0	D	III	A	Yes	2	No	G		
Styrene monomer	STY	30	0	D	III	A	Yes	2	.50-70(a), .50-81(a), (b)	G		
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	III	Α	No	N/A	No	G		
Tetrahydrofuran	THE	41	0	С	111	A	Yes	1	.50-70(b)	G		
1,2,4-Trichlorobenzene	TCB	36	0	E	111	А	Yes	1	No	G		
1,1,2-Trichloroethane	TCM	36	0	NA	[]]	Α	Yes	1	.50-73, .56-1(a)	G		
Trichloroethylene	TCL	36 2	0	NA	111	А	Yes	1	No	G		
1,2,3-Trichloropropane	TCN	36	0	E	11	Α	Yes	3	.50-73, .56-1(a)	G		
Trisodium phosphate solution	TSP	5	0	NA	111	Α	No	N/A	.50-73, .56-1(a), (c).	G		
Vanillin black liquor (free alkali content, 3% or more).	VBL	5	0	NA	III	Α	No	N/A	.50-73, .56-1(a), (c), (g)	G		
Vinyl acetate	VAM	1 13	0	С	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Vinyl neodecanate	VND	13	0	E	111	Α	No	N/A	50-70(a), 50-81(a), (b)	G		
Subchapter D Cargoes Authorized for Vapor Contr	OI	18 ²	D	С			Yes	1				
Acetone Acetophenone	ACP	18		E	-	A 	Yes	1				
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20		E		A	Yes	1				
	AEB	20	D	E		A	Yes	1				
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates Amyl acetate (all isomers)	AEC	34	D	D		A	Yes	1				
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D			A	Yes	1				
ANTO BIGGIOLISOT, IT. SECT. DITHELY!												



Cargo Authority Attachment

Vessel Name: KIRBY 27780

Shipyard: TRINITY ASHLAND

C1-1101570

29-Jun-11

CITY Hull #: 4780

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Cargo Identification	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 Tvoe	Tank Groun A	Vapor I App'd IY or NI Yes	VCS Caleoorv 1	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Butyl acetate (all isomers)	BAX	34	D	D		A	Yes	1		
Butyl alcohol (iso-)	IAL	20 2	D	D		A	Yes	1		
Butyl alcohol (n-)	BAN	20 2	D	D		A	Yes	1		
Butyl alcohol (sec-)	BAS	20 2	D	C		A	Yes	1		
Butyl alcohol (tert-)	BAT		D	c		Α.	Yes	1		
Butyl benzyl phthalate	BPH	34	D	E		A	Yes	1		
Buty toluene	BUE	32	D	D		A	Yes	1		
Caprolactam solutions	CLS	22	D	E		A	Yes	1		
Cyclohexane	CHX	31	D	C		A	Yes			
Cyclohexanol	CHN	20	D	E		A	Yes	1		
	CPD	30	D	D/E			Yes			
1,3-Cyclopentadiene dimer (molten)	CMP	32	D	D		A				
p-Cymene	IDA	19	D	E		A	Yes	1		-
iso-Decaldehyde		19	D				Yes	1		
n-Decaldehyde	DAL	30		E		A	Yes	1		
Decene			D	D		Α	Yes	1		
Decyl alcohol (all isomers)	DAX	20 2	D	E		<u> </u>	Yes	1		
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32 20 ²	D	E		Α	Yes	1		
Diacetone alcohol	DAA		D	D		Α	Yes	1		
ortho-Dibutyl phthalate	DPA	34	D	E		Α	Yes	1		
Diethylbenzene	DEB	32	D	D		Α	Yes	1		
Diethylene glycol	DEG	40 2	D	E		Α	Yes	1		
Diisobutylene	DBL	30	D	С		A	Yes	1		
Diisobutyl ketone	DIK	18	D	D		Α	Yes	11		
Diisopropylbenzene (all isomers)	DIX	32	D	E		A	Yes	11		
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	11		
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	1		
Distillates: Straight run	DSR	33	D	Ε		Α	Yes	11		
Dodecene (all isomers)	DOZ	30	D	D		Α	Yes	1		
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	E		Α	Yes	1		Manager Control
2-Ethoxyethyl acetate	EEA	34	D	D		Α	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 ²	D	С		Α	Yes	1		
Ethylbenzene	ETB	32	D	Ç		Α	Yes	1		
Ethyl butanol	EBT	20	D	D		Α	Yes	1		
Ethyl tert-butyl ether	EBE	41	D	С		Α	Yes	1	***	
Ethyl butyrate	EBR		D	D		A	Yes	1		
Ethyl cyclohexane	ECY		D	D		A	Yes			
			D	E		A		1		

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



Cargo Authority Attachment

Vessel Name: KIRBY 27780

Shipyard: TRINITY ASHLAND

Serial # C1-1101570

29-Jun-11

Dated:

CITY Hull #: 4780

Official #: 1232600

Naphtha: Petroleum

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Cargo Identification Conditions of Carriage App'd (Y or N) Yes Compat Special Requirements in 46 CFR Inso. Grade Category 151 General and Mat'ls of Code Chapter Groun Ethylene glycol butyl ether acetate 34 D Ethylene glycol diacetate FGY 34 n A Yes FPF 40 ח F Ethylene glycol phenyl ether Yes A D D Ethyl-3-ethoxypropionate EEP 34 A Yes 1 D Ε 2-Ethylhexanol EHX 20 Yes Α Ethyl propionate EPR 34 D C A Yes Ethyl toluene ETE 32 D ٥ Α Yes Formamide FAM 10 D E Α Yes Furfuryl alcohol FAL 20 2 D E A Yes Gasoline blending stocks: Alkylates GAK 33 D A/C Α Yes Gasoline blending stocks: Reformates GRF D A/C A Yes Gasolines: Automotive (containing not over 4.23 grams lead per D С Yes Gasolines: Aviation (containing not over 4.86 grams of lead per GAV 33 D C Α Yes 1 GCS Gasolines: Casinghead (natural) 33 D A/C A Yes 1 GPL 33 A/C D Gasolines: Polymer A Yes 1 GSR 33 D A/C Α Gasolines: Straight run Yes Glycerine GCR 20 2 D E A Yes Heptane (all isomers), see Alkanes (C6-C9) (all isomers) D С HMX 31 A Yes D Heptanoic acid HEP E Α Yes Heptanol (all isomers) HTX 20 D D/E A Yes HPX 30 D C A 2 Heptene (all isomers) Yes HPE 34 D E A Yes Heptyl acetate Hexane (all isomers), see Alkanes (C6-C9) HXS 31 2 D B/C Α Yes HXO D E Α Hexanoic acid Yes HXN 20 D D Α Yes Hexanol D 30 Α Yes Hexene (all isomers) D A Yes Hexylene glycol D Yes Isophorone Jet fuel: JP-4 D A Yes Jet fuel: JP-5 (kerosene, heavy) 33 D D Yes KRS D D Α Kerosene MTT D D A Methyl acetate MAL C Methyl alcohol Methylamyl acetate MAC D D A MAA D D Methylamyl alcohol MAK D D Methyl amyl ketone MBE C Methyl tert-butyl ether MBK 18 C Yes Methyl butyl ketone MRU C Α Yes Methyl butyrate MEK 18 2 D C Α Yes Methyl ethyl ketone D MHK D A Yes 18 Methyl heptyl ketone Yes MIK 18 2 A Methyl isobutyl ketone MNA 32 D Yes Methyl naphthalene (molten) MNS 33 A Yes 1 Mineral spirits MRE D Α 1 D Yes Myrcene NAG D A Yes 1 Naphtha: Heavy PTN D Α Yes





Cargo Authority Attachment

Vessel Name: KIRBY 27780 Official #: 1232600

Shipyard: TRINITY ASHLAND

Serial #: C1-1101570

CITY Hull #: 4780

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Cargo Identifica	ition	,					_		tions of Carriage	
Name Naphtha: Solvent	Chem Code NSV	Compat Group No 33	Sub Chapter D	Grade D	Hull Tvoe	Tank Groun A	App'd		Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period
Naphtha: Stoddard solvent	NSS	33	D	D		A	Yes	1		
Naphtha: Vamish makers and painters (75%)	NVM	33	D	C		A	Yes	1		
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		A	Yes	1		
Nonene (all isomers)	NON	30		D		A	Yes	2		
Nonyl alcohol (all isomers)	NNS	20 2	D	E		A	Yes	1		
Nonyl phenol	NNP	21	D	E		A	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NPE	40		E		A	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	c		A	Yes	1		
Octanoic acid (all isomers)	OAY	4	D	E		A	Yes	1		
Octanol (all isomers)	OCX	20 ²		E		A	Yes	1		
Octene (all isomers)	OTX	30	D	c			Yes	2		
Oil, fuel: No. 2	OTW	33	D	D/E	-	A	Yes			
Oil, fuel: No. 2-D	OTD	33	D	D		A 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			
Oil, fuel: No. 6	OSX	33	D	E		A	Yes	1		
Oil, misc: Crude	OIL	33	D	C/D		A		1		
Oil, misc: Diesel	ODS	33	D	D/E			Yes			
						A .	Yes	1		
Oil, misc: Gas, high pour	OGP	33	D	E		<u>A</u>	Yes	1		
Oil, misc: Lubricating	OLB	33	D	E		<u> </u>	Yes	1		
Oil, misc: Residual	ORL	33	D	E	100	Α	Yes	1		
Oil, misc: Turbine	OTB	33	D	E		Α	Yes	1		
Pentene (all isomers)	PTX	30	D	<u>A</u>		Α	Yes	5		
n-Pentyl propionate	PPE	34	D	D		Α	Yes	1		
alpha-Pinene	PIO	30	D	D		A	Yes	11		
beta-Pinene	PIP	30	D	D		Α	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	Е		A	Yes	1		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	E		Α	Yes	1		
Palybutene	PLB	30	D	E		Α	Yes	1		
Polypropylene glycol	PGC	40	D	E		Α	Yes	1		
iso-Propyl acetate	IAC	34	D	С		Α	Yes	1		
n-Propyl acetate	PAT	34	D	С		Α	Yes	11		
iso-Propyl alcohol	IPA	20 2	D	С		Α	Yes	1		
n-Propyl alcohol	PAL	20 2	D	С		Α	Yes	1		
Propylbenzene (all isomers)	PBY	32	D	D		Α	Yes	1		
iso-Propylcyclohexane	IPX	31	D	D		Α	Yes	1		
Propylene glycol	PPG	20 ²	D	E	LINE ST.	Α	Yes	1		
Propylene glycol methyl ether acetate	PGN	34	D	D		Α	Yes	1		
Propylene tetramer	PTT	30	D	D		Α	Yes	1		
Sulfolane	SFL	39	D	Е		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	E		Α	Yes	1		
Triethylbenzene	TEB	32	D	E		Α	Yes	1		
Triethylene glycol	TEG	40	D	Е		Α	Yes	1		
Triethyl phosphate	TPS	34	D	E	1001 - 0000	Α	Yes	1		





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

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: KIRBY 27780

Shipyard: TRINITY ASHLAND

CITY

Hull #: 4780

Official #: 1232600

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Cargo Identification								Conditions of Carriage				
Name Trimethylbenzene (all isomers)	Chem Code TRE	Compat Group No 32	Sub Chapter D	Grade {D}	Hull Type	Tank Group A	App'd		Special Requirements in 46 CFR 151 General and Mat'ls of	Insp.		
Trixylenyl 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				



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

Serial #: C1-1101570

Dated: 29-Jun-11

Certificate of Inspection Cargo Authority Attachment

Vessel Name: KIRBY 27780 Official #: 1232600

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Shipyard: TRINITY ASHL

Hull #: 4780

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

Note 1 Note 2

Subchapter O Note 3

Note 4

The three letter designation assigned to the cargo in the Chemical Hazards Response Information System (CHRIS) Manual.

Compatability Group No.

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, 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

Subchanter

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.

A. B. C

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 cargues 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 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 Recovery Approved (Y or N) The vessel's lank group (as defined under the *46 CFR Tank Group Characteristics* listed on page 1) which is authorized for carriage of the named cargo.

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

Category 2

(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 156.170, 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 39.30-10). 1(b)) 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 (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 caiculations for cargoes with a vapor pressure greater than 14.7 psia at 115 F must take into account increased vapor-air

mixture densities and vapor growth rates as compared to Category 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This

requirement is in addition to the requirements of Category 1.

Category 6 (High vapor pressure and highly toxic) Must comply with requirements of Categories 1, 3 and 5. Category 7

(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.