

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

Certification Date: 24 Aug 2023 24 Aug 2028 **Expiration Date:** 

## Certificate of Inspection

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

Vessel Name	Official Num	ber	IMO Numb	er .	Call Sign	Service	
KIRBY 29070	124400	2				Tank Ba	orno.
		_				raik Di	arge
Hallan Bad						· · · · · · · · · · · · · · · · · · ·	
Hailing Port	Hul	l Material	Horse	nówer	Propulsion		
HOUMA, LA	Ç.	eel			ropasion		
UNITED OTATES	30						
UNITED STATES							
Place Built	Deliver	v Date	Keel Laid Date	Gross Tons	Net Tons	DWT	l and b
Orange, TX				R-1619	R-1619	OW I	Length R-297.5
LINITED OTATEO	13M	ay2013	03Jan2013	F	ŀ		10
UNITED STATES							
Owner		<u></u>	Operator			<del></del>	
KIRBY INLAND MARINE I					MARINE, LP		
55 WAUGH DR STE 1000 HOUSTON, TX 77007	)			Market St			
UNITED STATES				nelview, TX ED STATE			
_			Oilli	-DOINIE	0		
This vessel must be manne	ed with the following li	censed	and unlicensed	Personnel	Included in wh	nich thoro mu	et ho
0 Certified Lifeboatmen, 0	Certified Tankermen,	0 HSC	Type Rating, a	nd 0 GMD	SS Operators.	IIOI MICIO IIIC	ist De
0 Masters	0 Licensed Mates		Engineers		ilers	·	
0 Chief Mates	0 First Class Pilots	0 First A	Assistant Engineer	s			
0 Second Mates	0 Radio Officers	0 Secon	id Assistant Engin	eers			
0 Third Mates	0 Able Seamen		Assistant Enginee				
0 Master First Class Pilot	0 Ordinary Seamen	0 Licens	ed Engineers				
0 Mate First Class Pilots	0 Deckhands		ied Member Engin	eer			
In addition, this vessel may Persons allowed: 0	carry 0 Passengers,				ns in addition to	crew, and no	o Others. Total
Route Permitted And Co	•						
Lakes, Bays, and	Sounds plus L	imited	Coastwise	***			
Also, in fair weather of Florida.	nly, not more than	twelve	(12) miles f	com shore	between St. M	arks and Ca	rrabelle,
This vessel has been gravessel is operated in salt water intervals pechange in status occurs	alt water more than r 46 CFR 31.10-21(a	ı 6 moni	ths in any 12	month nev	ind the wage	al must bo	inexacted vains

### \*\*\*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.

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

	Annual/Period	ic/Re-Ins	pection	This certificate issued by: Lad Walling
Date	Zone	A/P/R	Signature	L. L. WOODMAN CDR, USCG, By direction
6-14-2624	RTR LA. TBSIP	À	Darrell Londry	Officer in Charge, Manne Inspection  Marine Safety Unit Port Arthur
				Inspection Zone



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(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

31Aug2033

24Aug2023

13May2013

Internal Structure

31Aug2028

24Aug2023

11Jun2018

### --- 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

29254

Barrels

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	819	12.5
2 P/S	816	12.5
3 P/S	686	12.5

### \*Loading Constraints - Stability\*

	Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
I	II	3763	9ft 8in	12.5	Rivers, Lakes, Bays, and Sound
-	1	4422	11ft Oin	12.5	Rivers, Lakes, Bays, and Sound

#### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), serial # C1-1300820, dated 29 Mar 2013, may be carried. The specified hazardous cargoes may be carried only in the tanks indicated.

Per 46 CFR 150.130, the person in charge of the vessel is responsible for ensuring the compatibility requirements of 46 CFR 150 are met. Cargoes must be checked for compatibility using figures, tables, and appendices of 46 CFR 150 in conjunction with the reactive group number from the "Compat Group No" column is listed in the vessel's CAA.

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

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 # C1-1204161, dated 25 Sep 2012, 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.

\*Stability and Trim\*

Per 46 CFR 151.10(c)(2), the maximum tank weights listed above reflect uniform (within 5%) loading at the deepest draft

<sup>\*</sup>Vapor Control Authorization\*



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Vessel Name: KIRBY 29070

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

### --- Inspection Status ---

### \*Cargo Tanks\*

	Internal Exam			External Exam	1	
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	13May2013	24Aug2023	31Aug2033	-	-	-
2 P/S	13May2013	24Aug2023	31Aug2033	-	-	-
3 P/S	13May2013	24Aug2023	31Aug2033	-	-	*
			Hydro Test			
Tank Id	Safety Valves		Previous	Last	Next	
1 P/S	-		•	~	-	
2 P/S	-		-	-	-	
3 P/S	_		_	_	_	

### --- 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 2 40-B

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



Serial #: C1-1300820 Dated:

29-Mar-13

## Certificate of Inspection

### Cargo Authority Attachment

Official #: 1244002

Shipyard: Orange Shipbuilding

Hull #: H-458

Tank Group Information	Cargo lo	dentificat	ion	-	Cargo		Tanks		Tanks		Cargo Environmental Transfer Control Fire Special Requirements				special Requirements				Special Requirements			
Tok Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Seg Tank	Туре	: Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Tem; Cont					
A #1P/S, #2P/S, #3P/S	12.5	Atmos.	Amb.	ŧI	1ii 2ii	Integral Gravity	PV	Closed	Ħ	G-1	NR	NA	Portable		55-1(b), (c), (e), (f), (h), (j), 56-1(a), (b), (d), (f), (g),	NR	No					

- Notes: 1. Under Environmental Control, Tanks, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo tanks.
  - 2. Under Environmental Control, Handling Space, NR means that the tank group is suitable only for those cargoes which require no environmental control in the cargo handling space. NA means that the vessel does not have a cargo control space, and this requirement is not applied.
  - 3. Under Electrical Hazard Class, NA means that the tank group is suitable only for those cargoes which have no electrical hazard class requirement. NR means that the vessel has no electrical equipment located in a hazardous location.

**List of Authorized Cargoes** 

Cargo Identificatio	n					Conditions of Carriage					
						-	Vapor Re	scovery	<del></del>		
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	[#]	Α	Yes	3	No	G	
Acrylonitrile	ACN	15 <sup>2</sup>	0	С	H	Α	Yes	4	.50-70(a), .55-1(e)	G	
Adiponitrile	ADN	37	0	E	lŧ	Α	Yes	1	No	G	
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	H	Α	No	N/A	.50-81, .50-86	G	
Aminoethylethanolamine	AEE	8	0	E	HI	Α	No	N/A	.55-1(b)	G	
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	H	Α	No	N/A	No	G	
Benzene	BNZ	32	0	С	HI	Α	Yes	1	.50-60	G	
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	BHB	32 <sup>2</sup>	0	С	H	Α	Yes	1	.50-60	G	
Benzene or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 <sup>2</sup>	0	С	H	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	H	Α	Yes	1	.50-60	G	
Butyl acrylate (all isomers)	BAR	14	0	D		Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Butyl methacrylate	ВМН	14	0	D	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G	
Butyraldehyde (all isomers)	BAE	19	0	С	Ш	Α	Yes	1	.55-1(h)	G	
Camphor oil (light)	CPO	18	0	D	il .	Α	No	N/A	No	G	
Chemical Oil (refined, containing phenolics)	COD	21	0	E	)I	Α	No	N/A	.50-73	G	
Chlorobenzene	CRB	36	0	D	Ш	Α	No	N/A	No	G	
Chloroform	CRF	36	0	NA	111	A	No	N/A	No	G	
Coal tar naphtha solvent	NCT	33	0	D		Α	Yes	1	.50-73	G	
Creosote	CCW	21 2	0	E	ili	Α	No	N/A	No	G	
Cresols (all isomers)	CRS	21	0	E	HI	A	No	N/A	No	G	
Cresylate spent caustic	CSC	5	0	NA	111	Α	No	N/A	.50-73, .55-1(b)	G	
Cresylic acid tar	CRX		0	E	Ш	Α	No	N/A	.55-1(f)	G	
Crotonaldehyde	CTA	19 2	0	С	H	Α	Yes	4	.55-1(h)	G	
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG	*	0	С	Ш	Α	No	N/A	No	G	
Cyclohexanone	ССН	18	Q	D	111	Α	Yes	1	.56-1(a), (b)	G	
Cyclohexanone, Cyclohexanol mixture	CYX	18 <sup>2</sup>	0	E		Α	Yes	1	.56-1 (b)	G	
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	0	D	III	Α	Yes	1	.50-60, .56-1(b)	G	
iso-Decyl acrylate	IAI	14	0	E	III	Α	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	G	
Dichlorobenzene (all isomers)	DBX	36	0	Ė	III	Α	No	N/A	.56-1(a), (b)	G	
1,1-Dichloroethane	DCH	36	0	С	III	Α	No	N/A	No	G	
2,2'-Dichloroethyl ether	DEE	41	0	D	11	Α	No	N/A		G	
Dichloromethane	DCM	36	0	NA	111	A	No	N/A	No	G	



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## Certificate of Inspection

## Cargo Authority Attachment

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Official #: 1244002

Shipyard: Orange Shipbuilding

Cargo Identifica	tion		· · · · · · · · · · · · · · · · · · ·			Conditions of Carriage						
							Vapor f	Recovery				
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
1,1-Dichloropropane	DPB	36	0	¢	111	Α	No	N/A		G		
1,2-Dichloropropane	DPP	36	0	С		A	No	N/A	······································	G		
1,3-Dichloropropane	DPC	36	0	C		A_	No	N/A		G		
1,3-Dichloropropene	DPU	15	0	D	H	Α	No	N/A		G		
Dichloropropene, Dichloropropane mixtures	DMX	15	0	Ç		Α	No	N/A		G 		
Diethanolamine	DEA	8	0	E	H	Α	No	N/A		G		
Diethylamine	DEN	7	0	С		Α	Yes	3	.55-1(c)	G		
Diethylenetriamine	DET	7 2	0	E	111	Α	Yes	1	.55-1(c)	G		
Diisobutylamine	DBU	7	0	D	111	Α	Yes	3	.55-1(c)	G		
Diisopropanolamine	DIP	8	0	E	111	Α	Yes	1	.55-1(c)	G		
Diisopropylamine	DIA	7	0	С	II.	Α	Yes	3	.55-1(c)	G		
N,N-Dimethylacetamide	DAC	10	0	E	111	Α	Yes	3	.56-1(b)	G		
Dimethylformamide	DMF	10	0	D	111	Α	Yes	1	.55-1(e)	G		
Di-n-propylamine	DNA	7	0	C	II	Α	Yes	3	.55-1(c)	G		
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	0	E	111	Α	No	N/A	.56-1(b)	G		
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#	11	Α	No	N/A	No	G		
EE Glycol Ether Mixture	EEG	40	0	D	111	Α	No	N/A	No	G		
Ethanolamine	MEA	. 8	0	Ε	111	Α	No	N/A	.55-1(c)	G		
Ethyl acrylate	EAC	14	0	C	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Ethylamine solution (72% or less)	EAN	7	0	Α	II.	Α	No	N/A	.55-1(b)	G		
N-Ethylbutylamine	EBA	7	0	D	1	Α	Yes	: 3	.55-1(b)	G		
N-Ethylcyclohexylamine	ECC	7	0	D	III	Α	Yes	1	.55-1(b)	G		
Ethylene cyanohydrin	ETC	20	0	E	Ш	Α	No	N/A	No	G		
Ethylenediamine	EDA	7 2	0	D	111	Α	Yes	1	.55-1(c)	G		
Ethylene dichloride	EDC	36 ²	0	С		Α	No	N/A	No	G		
Ethylene glycol hexyl ether	EGH	40	0	E	111	A	No	N/A	No	G		
Ethylene glycol monoalkyl ethers	EGC	40	0	D/E	111	Α	Yes	i 1	No	G		
Ethylene glycol propyl ether	EGP	40	0	E	111	А	Yes	1	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		Α	Yes	i 2	.50-70(a)	G		
2-Ethyl-3-propylacrolein	EPA		0	E		Α	Yes		Na	G		
Formaldehyde solution (37% to 50%)	FMS		-	D/E	Ш	Α	No	N/A	.55-1(h)	G		
Furfural	FFA	19	0	D	111	A	No	N/A	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	G		
Glutaraldehyde solution (50% or less)	GTA		0	NA	111	Α	No	N/A		G		
Hexamethylenediamine solution	HMC		0	E	<u>```</u>	A	Yes		.55-1(c)	G		
Hydrocarbon 5-9	HFN		0	c		A	Yes		.50-70(a), .50-81(a), (b)	G		
Isoprene	IPR	30		A	111	A	No	N/A	.50-70(a), .50-81(a), (b)	G		
Isoprene, Pentadiene mixture	IPN		0	В	111	Α	No	N/A		G		
Mesityl oxide	MSC	) 18 <sup>2</sup>		D	111	Α	Yes		No No	G		
	MAN		0	c	111	A	Yes		.50-70(a), .50-81(a), (b)	G		
Methyl acrylate  Methylcyclopentadiene dimer	MCK		0	C	<u>'''</u> -	<u>^</u>	Yes		No	G		
	MEF			E			Yes		.55-1(e)	G		
2-Methyl-5-ethylpyridine	MMi				<u>'''</u> -	^_	Yes		.50-70(a), .50-81(a), (b)	G		
Methyl methacrylate	MPF		0	D	111	A	Yes		.55-1(c)	G		
2-Methylpyridine	MSF		0	D	111	^_	Yes		.50-70(a), .50-81(a), (b)	G		
alpha-Methylstyrene	MPL			D	111	A	Yes		.55-1(c)	G		
Morpholine	NTE		0	D	111	^	No	N/A		G		
Nitroethane	NPM		0	ם	- 11	A	Yes		.50-81	G		
1- or 2-Nitropropane	INFIV	ı 4∡	U	U	HI	^	165	, 1		-		



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## Cargo Authority Attachment

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Shipyard: Orange Shipbuilding

Serial #: C1-1300820

29-Mar-13

Cargo Identification	Conditions of Carriage									
				·····		·	Vapor Recovery			
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat's of	Insp. Period
1,3-Pentadiene	PDE	30	0	Α	111	Α	No	N/A	.50-70(a), .50-81	G
Polyethylene polyamines	PEB	7 2	0	E	111	Α	No	N/A	.55-1(e)	G
iso-Propanolamine	MPA	8	0	E	111	Α	Yes	1	.55-1(c)	G
iso-Propylamine	IPP	7	0	Α	ll	Α	Yes	5	.55-1(c)	G
Pyridine	PRD	9	0	С	111	Α	Yes	1	.55-1(e)	G
Sodium chlorate solution (50% or less)	SDD	0 1,2	0	NA	111	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	111	Α	No	N/A	.50-73, .55-1(b)	G
Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but less than 200 ppm)	SSI	0 1,2	0	NA	111	Α	No	N/A	.50-73, .55-1(b)	G
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1.2	0	NA	)I	Α	No	N/A	.50-73, .55-1(b)	G
Styrene (crude)	STX		0	Ď	11	Α	Yes	2	No	G
Styrene monomer	STY	30	0	D	Ш	Α	Yes	2	50-70(a). 50-81(a), (b)	G
Tetraethylenepentamine	TTP	7	0	E	III	Α	Yes	1	.55-1(c)	G
Tetrahydrofuran	THF	41	0	С	[1]	Α	Yes	1	.50-70(b)	G
o-Toluidine	TLI	9	0	E	11	Α	Yes	3	.50-5, .50-73	G
1,2,4-Trichlorobenzene	TCB	36	0	E	111	Α	No	N/A	No	G
1,1,2-Trichloroethane	TCM	36	0	NA	III	A	No	N/A	.50-73, .56-1(a)	G
Trichloroethylene	TCL	36 <sup>2</sup>	0	NA	111	Α	No	N/A	No	G
1,2,3-Trichloropropane	TCN	36	0	E	Įį.	Α	No	N/A	.50-73, .56-1(a)	Ģ
Triethanolamine	TEA	8 2	0	E	l)i	Α	Yes	1	.55-1(b)	G
Triethylamine	TEN	7	0	С		Α	Yes		.55-1(e)	G
Triethylenetetramine	TET	72	0	E		Α	Yes		.55-1(b)	G
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	Ш	Α	No	N/A	.56-1(b)	G
Vinyl acetate	VAM	13	0	С	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Vinyl neodecanate	VND	13	0	E		Α	No	N/A	.50-70(a), .50-81(a), (b)	G
Subchapter D Cargoes Authorized for Vapor Contro	ol									
Acetone	ACT	18 <sup>2</sup>	Ď	С	<i></i>	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	Đ	D		Α	Yes	1		
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		Α	Yes	1		
Benzyl alcohol	BAL	21	D	Ė		Α	Yes	1		
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		Α	Yes	1		
Butyl acetate (all isomers)	BAX	34	D	D		Α	Yes	1		
Butyl alcohol (iso-)	IAL	20 <sup>2</sup>	D	D		A	Yes	1		
Butyl alcohol (n-)	BAN	20 <sup>2</sup>	D	D		A	Yes	1		
Butyl alcohol (sec-)	BAS	20 <sup>2</sup>	D	C		—- <u>``</u>	Yes	1	***************************************	
Butyl alcohol (tert-)	BAT	-	D	C		Α	Yes	1	*****	
Butyl benzyl phthalate	ВРН	34	D	E		Α	Yes	1		
Butyl toluene	BUE	32	D	D		<u>/`</u> A	Yes	1		
Caprolactam solutions	CLS	22	D	Ē		<u></u> A	Yes	<u>-</u>		
Cyclohexane	CHX	31	D	c		A	Yes	1		
Cyclohexanol	CHN	20	D	E		A	Yes	<u>'</u>		
V / VICTORIAN INI	CPD	۵۷		<u> </u>			103	1		



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Shipyard: Orange Shipbuilding

Cargo Identificatio	n					Conditions of Carriage						
						<del></del>	Vapor I	Recovery		Ainte		
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		
p-Cymene	CMP	32	D	D		Α	Yes	1				
iso-Decaldehyde	IDA	19	D	E		Α	Yes	1				
n-Decatdehyde	DAL	19	D	E		Α	Yes	1				
Decene	DCE	30	D	D		Α	Yes	11				
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>	D	E		Α	Yes	11				
n-Decylbenzene, see Alkyl(C9+)benzenes	DBZ	32	D	E		Α	Yes	1				
Diacetone alcohol	DAA	20 <sup>2</sup>	D	D		Α	Yes	1				
ortho-Dibutyl phthalate	DPA	34	D	Ε		Α	Yes	1				
Diethylbenzene	DEB	32	D	D		Α	Yes	1				
Diethylene glycol	DEG	40 <sup>2</sup>	D	E		Α	Yes	1				
Diisobutylene	DBL	30	D	С		Α	Yes	1				
Diisobutyl ketone	DIK	18	D	D		Α	Yes	1				
Diisopropylbenzene (all isomers)	DIX	32	D	Ε		Α	Yes	1				
Dimethyl phthalate	DTL	34	Ð	Ε		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	Ε		Α	Yes	1				
Diphenyl ether	DPE	41	D	{E}		Α	Yes	1				
Dipropylene glycol	DPG	40	Đ	E		A	Yes	1				
Distillates: Flashed feed stocks	DFF	33	D	E		Α	Yes	1				
Distillates: Straight run	DSR	33	D	Е		A	Yes	1				
Dodecene (all isomers)	DOZ	30	D	D		Α	Yes	1	·-····································			
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	Q	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	Ð	E		Α	Yes	1				
Ethyl alcohol	EAL	20 <sup>2</sup>	D	С		Α	Yes	1				
Ethylbenzene	ЕТВ	32	D	С		Α	Yes	1				
Ethyl butanol	EBT	20	D	D		Α	Yes	1				
Ethyl tert-butyl ether	EBE	41	D	С		Α	Yes	1				
Ethyl butyrate	EBR	34	D	D		A	Yes	1				
Ethyl cyclohexane	ECY	31	D	D		A	Yes	1	······································			
Ethylene glycol	EGL	20 <sup>2</sup>	D	E		A	Yes	<u>`</u>				
Ethylene glycol butyl ether acetate	EMA	34	<u>-</u> D			Α	Yes	1	·//			
Ethylene glycol diacetate	EGY	34	 D	E		Α	Yes	<u>·</u>				
Ethylene glycol phenyl ether	EPE	40		 E		Α	Yes	1				
Ethyl-3-ethoxypropionate	EEP	34	D	D		A	Yes	1				
2-Ethylhexanol	EHX	20	D	E		A	Yes	1				
Ethyl propionate	EPR	34	D	C		Α	Yes	1				
Ethyl toluene	ETE	32	D	D		A	Yes	<u>-</u>				
Formamide	FAM	10	D	E		A	Yes	<u>'</u>				
Furfuryl alcohol	FAL	20 <sup>2</sup>	D	 E		A		<u>'</u>				
	GAK	33	D	A/C		A	Yes Yes	1				
Gasoline blending stocks: Alkylates Gasoline blending stocks: Reformates	GRF		ם	A/C								
Gasolines: Automotive (containing not over 4.23 grams lead per	GAT	33 33	D	C		A 	Yes Yes	1				
gallon)	GAI	JJ	<i>U</i>		*************	~	162	į.				



Serial #: C1-1300820 Dated:

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# Certificate of Inspection

## Cargo Authority Attachment

Official #: 1244002

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Shipyard: Orange Shipbuilding

Cargo Identification	on				<u> </u>	Conditions of Carriage						
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period		
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	С	1	Α	Yes	1				
Gasolines: Casinghead (natural)	GCS	33	D	A/C		A	Vaa					
Gasolines: Polymer	GPL	33	D	A/C	····	^	Yes Yes	1	·			
Gasolines: Straight run	GSR	33		A/C			Yes	1				
Glycerine Glycerine	GCR	20 <sup>2</sup>	D	E								
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D			Α	Yes	1				
Heptanoic acid				C	·	A	Yes	1				
	HEP	4	D	E		A	Yes	1				
Heptanol (all isomers)	HTX	20	D	D/E		A	Yes	1				
Heptene (all isomers)	HPX	30	<u>D</u>	C		Α .	Yes	2				
Heptyl acetate	HPE	34	D	Ė		Α	Yes	1	·····			
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 2	D	B/C		Α	Yes	1				
Hexanoic acid	HXO	4	D	E		Α	Yes	1				
Hexanol	HXN	20	D	D		A	Yes	1				
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2				
Hexylene glycol	HXG	20	D	E		Α	Yes	11	······································			
Isophorone	IPH	18 <sup>2</sup>	D	E		Α	Yes	11				
Jet fuel: JP-4	JPF	33	D	E		Α	Yes	1				
Jet fuel: JP-5 (kerosene, heavy)	JPV	33	D	D		Α	Yes	1				
Kerosene	KRS	33	Ď	D		Α	Yes	1				
Methyl acetate	MTT	34	D	D		Α	Yes	1				
Methyl alcohol	MAL	20 <sup>2</sup>	D	С	***************************************	Α	Yes	1				
Methylamyl acetate	MAC	34	D	D		Α	Yes	1				
Methylamyl alcohol	MAA	20	D	D		Α	Yes	1				
Methyl amyl ketone	MAK	18	Ď	D		A	Yes	1				
Methyl tert-butyl ether	MBE	41 <sup>2</sup>	D	С		A	Yes	1				
Methyl butyl ketone	MBK	18	D	C		Α.	Yes	1				
Methyl butyrate	MBU	34	D.	c		A	Yes	1				
Methyl ethyl ketone	MEK	18 2	D	Č	·····	A	Yes	<u>'</u>	***************************************			
Methyl heptyl ketone	MHK	18	D	Ď		A	Yes	1		,		
Methyl isobutyl ketone	MIK	18 <sup>2</sup>	D	C				· · · · · · · · · · · · · · · · · · ·				
		·····				A	Yes	1				
Methyl naphthalene (molten)	MNA	32		Ē		<u> </u>	Yes	1				
Mineral spirits	MNS	33	D	D		Α .	Yes	1				
Myrcene	MRE	30	D 	D		A	Yes	1				
Naphtha: Heavy	NAG	33	<u>D</u>	#		Α	Yes	11				
Naphtha: Petroleum	PTN	33	D	#		Α	Yes	1				
Naphtha: Solvent	NSV	33	D	D		A	Yes	1				
Naphtha: Stoddard solvent	NSS	33	D	D		Α	Yes	1				
Naphtha: Vamish makers and painters (75%)	NVM	33	D	C		Α	Yes	1				
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31	D	D		Α	Yes	1				
Nonene (all isomers)	NON	30	D	D		Α	Yes	2				
Nonyl alcohol (all isomers)	NNS	20 <sup>2</sup>	D	E		Α	Yes	1				
Nonyl phenol	NNP	21	D	E		Α ·	Yes	1				
Nonyl phenol poly(4+)ethoxylates	NPE	40	D	E	***************************************	A	Yes	1				
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	Ď	С		Α	Yes	1	······································			
Octanoic acid (all isomers)	OAY	4	D	E		Α	Yes	1				
Octanol (all isomers)	осх	20 <sup>2</sup>	D	E		A	Yes	1				
	OTX	30	D	c		· · · · · · · · · · · · · · · · · · ·						



Serial #: C1-1300820 Dated:

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## Certificate of Inspection

## Cargo Authority Attachment

Official #: 1244002

Shipyard: Orange Shipbuilding Hull #: H-458

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Cargo Identificat	Cargo Identification										
		.,				Vapor Recovery					
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Period	
Oil, fuel: No. 2	OTW	33	D	D/E		Α	Yes	1			
Oil, fuel: No. 2-D	QTO	33	D	D		Α	Yes	1			
Oil, fuel: No. 4	OFR	33	D	D/E		Α	Yes	11			
Oil, fuel: No. 5	OFV	33	D	D/E		Α	Yes	1			
Oil, fuel: No. 6	OSX	33	D	E		Α	Yes	1			
Oil, misc: Crude	OIL	33	D	C/D		Α	Yes	1			
Oil, misc: Diesel	ODS	33	D	D/E		Α	Yes	1			
Oil, misc: Gas, high pour	OGP	33	D	E		Α	Yes	1			
Oil, misc: Lubricating	OLB	33	D	E		Α	Yes	1			
Oil, misc: Residual	ORL	33	D	E		Α	Yes	1			
Oil, misc: Turbine	ОТВ	33	D	E		Α	Yes	1			
Pentene (all isomers)	PTX	30	D	Α		Α	Yes	5			
n-Pentyl propionate	PPE	34	D	D		Α	Yes	1			
alpha-Pinene	PIO	30	D	D		Α	Yes	1			
beta-Pinene	PIP	30	D	D		Α	Yes	1	***************************************		
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether	PAG	40	D	E		Α	Yes	1	***************************************	,	
Poly(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	Ę		Α	Yes	1			
Polybutene	PLB	30	D	E		Α	Yes	1	······································		
Polypropylene glycol	PGC	40	D	E		Α	Yes	1			
iso-Propyl acetate	IAC	34	D	С		Α	Yes	1		***************************************	
n-Propyl acetate	PAT	34	D	С		Α	Yes	1			
iso-Propyl alcohol	IPA	20 <sup>2</sup>	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 <sup>2</sup>	D	E	***	Α	Yes	1	***************************************		
Propylene glycol methyl ether acetate	PGN	34	D	D		Α	Yes	1		~~~~~	
Propylene tetramer	PTT	30	D	Ď		Α	Yes	1			
Sulfolane	SFL	39	D	E		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	Ė		Α	Yes	1		·	
Triethylbenzene	TEB	32	D	E		A	Yes	1		<del></del>	
Triethylene glycol	TEG	40	 D	 E		A	Yes	<u>-</u> 1			
Triethyl phosphate	TPS	34	D	 E		Α	Yes	i		***************************************	
Trimethylbenzene (all isomers)	TRE	32	D	(D)		A	Yes	1	***************************************		
Trixylenyl phosphate	TRP	34	D	E		Α	Yes	1			
Undecene	UDC	30	D	D/E		Α	Yes	1			
1-Undecyl alcohol	UND	20	 D	E		Α	Yes	1			
Xylenes (ortho-, meta-, para-)	XLX	32	D	 D		A	Yes	<u>·</u>			
Ayeres (ano, mea, pala)		V4.	<i>u</i>				169				



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

Serial #:

C1-1300820 29-Mar-13

Dated:

## Certificate of Inspection

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

### Cargo Authority Attachment

Official #: 1244002

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Shipyard: Orange Shipbu

Hull #: H-458

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

Cargo Identification

Chem Code

Compatability Group No.

Note 1 Note 2

Subchapter Subchapter D Subchapter O

A, B, C

NA

Hull Type

Note 4

Grade

0001. Telephone (202) 372-1425.

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

Certain mixtures of cargoes may not have a CHRIS Code assigned.

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

and appendices of 46 CFR 150 in conjunction with the assigned reactive group number.

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.

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,

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-

Those subchapter O cargoes which are not classified as a flammable or combustible liquid.

No flammability/combustibility grade has been assigned yet as the necessary flash point/vapor pressure data for such assignments are presently not available.

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

Designed to carry products which require the maximum preventive measures to preclude the uncontrolled release of the cargo. See 46 CFR 151.10-1(b)(1). Designed to carry products which require significant preventive measures to preclude the uncontrolled release of cargo. See 46 CFR 151.10-1(b)(3).

Designed to carry products of sufficeint hazard to require a moderate degree of control. See 46 CFR 151.10-1(b)(4).

Not applicable to barges certificated under Subchapter D.

#### Conditions of Carriage

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

Yes: The vessel's VCS has been reviewed and approved by the MSC to control vapors of the specified loargo. 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: Category 1

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 39.30-10). 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 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 lies 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.

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