

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

Certification Date: Expiration Date:

19 Apr 2024 19 Apr 2029

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			Orr. in the second					
			Official Number	МО	Number	Call Sign	Service	
KIRBY 2701	1		1247210				Tank Ba	arge
Hailing Port							100	
HOUMA, LA	١		Hull Material		Horsepower	Propulsion		
			Steel					
UNITED ST	ATES							
Place Built			Delineau Data					
GALVESTO	N, TX		Delivery Date	Keel Laid Date	D 1610	Net Tons	DWT	Length
			24Jan2014	14Sep201	13 R-1619	R-1619 F		R-297.5
UNITED ST	ATES				es.	r		1-0
Owner				Oc	erator			
	ND MARINE LE					MARINE, LP		
HOUSTON,	DR STE 1000				350 MARKE			
UNITED STA					HANNELVIE\ NITED STATI			
				U	MILEDSIAII	ES		
This vessel n	nust be manned	with the fo	ollowing licensed	and unlicer	sed Personna	al Included in w	high thora mu	at ha
0 Certified Li	feboatmen, 0 C	ertified Ta	nkermen, 0 HSC	Type Ratin	g, and 0 GME	DSS Operators.	nich there mu	st be
0 Masters		0 Licensed N		Engineers		Oilers		
0 Chief Mate	es	0 First Class		\ssistant Engi	_			
0 Second Ma	ates	0 Radio Offic		d Assistant E				
0 Third Mate	s	0 Able Seam	en 0 Third	Assistant Eng	ineers			
0 Master Fire	st Class Pilot	0 Ordinary S	eamen 0 Licens	ed Engineers				
0 Mate First	Class Pilots	0 Deckhands	0 Qualif	ied Member E	ngineer			
In addition, the Persons allow	nis vessel may o ved: 0	arry 0 Pas	sengers, 0 Other	Persons in	crew, 0 Perse	ons in addition to	crew, and no	Others. Total
Route Pern	nitted And Con	ditions Of	Operation:					
	Bays, and		•					
Also, in fai Florida.	ir weather onl	y, not mo	re than twelve	(12) mile	s from shore	between St. M	arks and Car	rabelle,
This vessel	has been gran	ted a fre	sh water servic	ce examina	tion interva	l in accordance	e with 16 CE	R 31.10-21(b).
TE CHIES Dail	ie io obetaten	I III Sail	water more than	) h months	in anv 12 m	onth noriod *	ha	
doing Suic v	ader incerval	s and the	cognizant OCM	notified	in writing	as soon as thi	s change in	status occurs.
This tank ba Inspection H	arge is partic Program (TBSIF	ipating i ). Inspec	n the Eighth ar tion activities	nd Ninth Co aboard th	oast Guard D his barge sh	istrict's Tank all be conduct	Barge Strea	mlined ance with its
			NAL CERTIFIC					minim <sub>Olo</sub>
With this Insp	ection for Certif	ication hav	ring been comple	ted at New	Orleans I A	UNITED STATE	S the Officer	in Charge, Marine
inspection, 50	ector New Orlea	ans cenne	d the vessel, in al	I respects,	is in conformit	ty with the applic	able vessel	peotion laws and
the rules and	regulations pres	scribed the	reunder.					
	Annual/Peri				This certifica	te issued by:	1	
Date	Zone	A/P/R	Signatur	e	J. I	H. HART COMM	ANDER, by	wection
					Officer in Charge, M	latine Inspection		3 7
						Sector N	ew Orleans	1/2012 12 11
					to a second			



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

Certification Date: 19 Apr 2024 **Expiration Date:** 19 Apr 2029

## Certificate of Inspection

Vessel Name: KIRBY 27011

Tank Barge Action Plan (TAP). Inspection issues concerning this barge should be directed to MSU Port Arthur.

#### ---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

31Jan2034

20Feb2024

24Jan2014

Internal Structure

27Feb2029

27Feb2024

22Jan2019

### --- 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

28198

Barrels

Yes

Nο

#### \*Hazardous Bulk Solids Authority\*

Not Authorized

#### \*Loading Constraints - Structural\*

Tank Location Description	Max Cargo Weight per Tank (short tons)	Maximum Density (lbs/gal)
1 P/S	684	13.58
2 P/S	826	13.58
3 P/S	704	13.58

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

Hull Type	Maximum Load (short tons)	Maximum Draft (ft/in)	Max Density (lbs/gal)	Route Description
11	3849	10ft 3in	13.58	
11	3849	10ft 3in	13.58	
III	4221	11ft Oin	13.58	
III	4221	11ft 0in	13.58	

#### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial # C1-1301546 dated May 10, 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.

#### \*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 Marine Safety Center letters Serial # C1-1301546 dated May 10, 2013, 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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## **Certificate of Inspection**

Vessel Name: KIRBY 27011

The maximum design density of cargo which may be filled to the tank top is 7.05 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.

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 ---

#### \*Cargo Tanks\*

	Internal Exam	า		External Exa	m	
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	24Jan2014	27Feb2024	27Feb2034	-	-	-
2 P/S	24Jan2014	27Feb2024	27Feb2034	-	-	-
3 P/S	24Jan2014	27Feb2024	27Feb2034	-	-	-
			Hydro Test			
Tank Id	Safety Valves	S	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

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40-B

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

<sup>\*</sup>Stability and Trim\*



## Cargo Authority Attachment

Vessel Name: KIRBY 27011 Official #: 1247210

Shipyard: West Gulf Marine

C1-1301546

10-May-13

Hull #: 234

46 CFR 151 Tank Tank Group Information	-	Chara dentificat		tics			Tanks		Carg		Enviror			Special Require	ments	T	
Tnk Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Cargo Seg Tank	Туре	Vent	Gauge	Pipe Class			Handling Space	Fire Protection Provided	General	Materials of Construction		Temp Cont
A #1P/S, #2P/S, #3P/S	13.6	Atmos.	Amb.	и	1ii 2ii	Integral Gravity	PV	Closed	H	G-1	NR	NA	Portable	.50-60, .50-70(a), .50-70(b), .50-73,	55-1(b), (c), (e), (f), (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 Identificatio	n					Conditions of Carriage						
	1				. 1	l le	Vapor Re	ecovery	25.00	353		
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		
Authorized Subchapter O Cargoes												
Acetonitrile	ATN	37	0	С	111	A	Yes	3	No	G		
Acrylonitrile	ACN	15 <sup>2</sup>	0	С	11	Α	Yes	4	.50-70(a), .55-1(e)	G		
Adiponitrile	ADN		0	Е	11	Α	Yes	1	No	C		
Alkyl(C7-C9) nitrates	AKN		0	NA	Ш	Α	No	N/A		G		
Aminoethylethanolamine	AEE	8	0	E	Ш	Α	Yes	1	.55-1(b)	G		
Ammonium bisulfite solution (70% or less)	ABX	43 <sup>2</sup>	0	NA	III.	Α	No	N/A		Ģ		
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	10	Α	No	N/A		G		
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	11	Α	No	N/A		G		
Benzene	BNZ	32	0	С	91	Α	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 or hydrocarbon mixtures (containing Acetylene and 10% Benzene or more)	ВНА	32 <sup>2</sup>	0	С	10	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	- m	Α	Yes	1	.50-60	G		
Butyl acrylate (all isomers)	BAR	14	0	D	81	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Butyl methacrylate	BMH	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Butyraldehyde (all isomers)	BAE	19	0	¢	110	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	10	Α	No	N/A	No	G		
Caustic potash solution	CPS	5 <sup>2</sup>	0	NA	111	Α	No	N/A	.50-73, .55-1(j)	G		
Caustic soda solution	CSS	5 <sup>2</sup>	0	NA	101	Α	No	N/A	.50-73, .55-1()	G		
Chemical Oil (refined, containing phenolics)	COL	21	0	Ε	il	Α	No	N/A	.50-73	G		
Chlorobenzene	CRB	36	0	D	111	Α	Yes	1	No	G		
Chloroform	CRF	36	0	NA	191	Α	Yes	3	No	G		
Coal tar naphtha solvent	NCT	33	0	D	01	Α	Yes	1	.50-73	G		
Creosote	CCV	V 21 <sup>2</sup>	0	Ε	III	Α	Yes	. 1	No	G		
Cresols (all isomers)	CRS	21	0	Е	III	Α	Yes	1	No	G		
Cresylate spent caustic	CSC	5	0	NA	10	Α	No	N/A	.50-73, .55-1(b)	G		
Cresylic acid tar	CRX	(	0	E	101	Α	Yes	1	.55-1(f)	G		
Crotonaldehyde	CTA	19 <sup>2</sup>	0	С	- 11	Α	Yes	4	.55-1(h)	G		
Crude hydrocarbon feedstock (containing Butyraldehydes and Ethylpropyl acrolein)	CHG	÷	0	С	91	Α	No	N/A	No	G		
Cyclohexanone	CCF	1 18	0	D	Ш	Α	Yes	1	.56-1(a), (b)	G		
Cyclohexanone, Cyclohexanol mixture	CYX	18 <sup>2</sup>	0	E	101	A	Yes	1	.56-1 (b)	G		
Cyclohexylamine	CHA	7	0	D	101	Α	Yes	1	.56-1(a), (b), (c), (g)	G		
Cyclopentadiene, Styrene, Benzene mixture	CSE	30	0	D	10.	Α	Yes	: 1	.50-60, .56-1(b)	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.



## Cargo Authority Attachment

Vessel Name: CTCO 321 Official #: 1247210

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Shipyard: West Gulf Marine

10-May-13

Cargo Identification						Conditions of Carriage						
							Vapor F	Recovery				
Name	Chem	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. Perior		
iso-Decyl acrylate	IAI	14	0	E	111	Α	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	G		
Dichlorobenzene (all isomers)	DBX	36	0	E	101	Α	Yes	3	.56-1(a), (b)	G		
1,1-Dichloroethane	DCH	36	0	С	10	A	Yes	1	No	G		
2,2'-Dichloroethyl ether	DEE	41	0	D	Н	Α	Yes	1	.55-1(f)	G		
Dichloromethane	DCM	36	0	NA	10	Α	Yes	5	No	G		
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	0	Е	10	Α	No	N/A	.56-1(a), (b), (c), (g)	G		
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1.2	0	Α	m	Α	No	N/A	.56-1(e), (b), (c), (g)	G		
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0	Е	10	Α	No	N/A		G		
1,1-Dichloropropane	DPB	36	0	С	10	Α	Yes	3	No	G		
1,2-Dichloropropane	DPP	36	0	C	10	A	Yes	3	No	G		
1,3-Dichloropropane	DPC	36	ō	c	10	A	Yes	3	No	G		
1,3-Dichloropropene	DPU	15	0	D		A	Yes	4	No	G		
Dichloropropene, Dichloropropane mixtures	DMX		0	c	11	A	Yes	1	No	G		
Diethanolamine	DEA	8	0	E	181	Ā	Yes	1	.55-1(c)	6		
Diethylamine	DEN	7	0	C	181	A	Yes	3	.55-1(c)	- G		
Diethylenetriamine	DET	7 2	0	E	111	A	Yes	1	.55-1(c)	G		
Diisobutylamine	DBU	7	0	D	10		Yes	3	.55-1(c)	G		
Diisopropanolamine	DIP	8	0	E	<u></u>	A	Yes	1	55-1(c)	G		
Diisopropylamine	DIA	7	0	C	11	Â	Yes	3	.55-1(c)	G		
N,N-Dimethylacetamide	DAC	10	0						.56-1(b)			
Dimethylethanolamine	DMB		0	D	101		Yes	3		G		
Dimethylformamide	DMF	10	0	D	10	A	Yes	1	.56-1(b), (c)	G		
Di-n-propylamine	DNA	7	0	C		A	Yes	1	55-1(e)	G		
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	0	E	ti	A	Yes	3	55-1(c)	G		
Dodecyl diphenyl ether disulfonate solution	DOS	43	0		- 111	A	No	N/A		G		
EE Glycol Ether Mixture	EEG	40	-	#	H	A	No	N/A	No	G		
Ethanolamine	MEA		0	D	HI	<u>A</u> _	No	N/A	No	G		
Ethyl acrylate		8	0	E		<u>A</u>	Yes	1	.55-1(c)	G		
Ethylamine solution (72% or less)	EAC	14	0	C	Ш	Α	Yes	2	.50-70(a) .50-81(a) (b)	Ģ		
N-Ethylbutylamine	EAN		0	A	- 11	A	No	N/A		G		
N-Ethylcyclohexylamine	EBA	7	0	D	- 111	<u>A</u>	Yes	3	.55-1(b)	G		
Ethylene cyanohydrin	ECC	7	0	D	- 111	Α	Yes	1	.55-1(b)	G		
Ethylenediamine	ETC	20	0	Ę		A	Yes	1	No	G		
Ethylene dichloride	EDA	7 2	0	D	111	Α	Yes	1	\$5-1(€)	G		
	EDC	36 <sup>2</sup>	0	С	- 10	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	101	Α	Yes	1	No	Ģ		
Ethylene glycol propyl ether	EGP	40	0	E		A	Yes	1	No	G		
2-Ethylhexyl acrylate	EAI	14	0	E	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Ethyl methacrylate	ETM	14	0	D/E	111	Α	Yes	2	50-70(a)	G		
2-Ethyl-3-propylacrolein	EPA	19 <sup>2</sup>	0	E	FII	Α	Yes	1	No	G		
Formaldehyde solution (37% to 50%)	FMS	19 <sup>2</sup>	0	D/E	Ш	Α	Yes	1	.55-1(h)	G		
Furfural	FFA	19	0	D	Ш	Α	Yes	1	55-1(h)	G		
Glutaraldehyde solution (50% or less)	GTA	19	0	NA	111	Α	No	N/A	No	G		
Hexamethylenediamine solution	НМС	7	0	Ε	III	Α	Yes	1	.55-1(c)	G		
Hexamethyleneimine	HMI	7	0	С	- 11	Α	Yes	1	.56-1(b), (c)	G		
Hydrocarbon 5-9	HFN		0	С	W	Α	Yes	1	.50-70(a), .50-81(a), (b)	G		
Isoprene	IPR	30	0	Α	(1)	Α	No	N/A	50-70(a), 50-81(a), (b)	G		
Isoprene, Pentadiene mixture	IPN		0	В	- III	Α	No	N/A	50-70(a), 55-1(c)			



Serial #: C1-1301546

10-May-13

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 321 Official #: 1247210

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Shipyard: West Gulf Marine

Cargo Identification						Conditions of Carriage							
							Vapor F	Recovery					
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	(Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Perio			
(raft pulping liquors (free alkali content 3% or more)(including: Black, Green, or White liquor)	KPL	5	0	NA	III	Α	No	N/A	.50-73, .56-1(a). (c). (g)	G			
Mesityl oxide	MSO	18 <sup>2</sup>	0	D	Ш	Α	Yes	1	No	G			
Viethyl acrylate	MAM	14	0	С	III	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Methylcyclopentadiene dimer	MÇK	30	0	С	Ш	Α	Yes	1	No	G			
Wethyl diethanolamine	MDE	8	0	Ε	10	Α	Yes	1	.56-1(b), (c)	G			
2-Methyl-5-ethylpyridine	MEP	9	0	E	III	Α	Yes	1	.55-1(e)	G			
Methyl methacrylate	MMN	1 14	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
2-Methylpyridine	MPR	9	0	D	III	Α	Yes	3	.55-1(c)	G			
alpha-Methylstyrene	MSR	30	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Morpholine	MPL	7 2	0	D	(1)	Α	Yes	1	.55-1(u)	G			
Nitroethane	NTE	42	0	D	II	Α	No	N/A	.50-81, .56-1(b)	G			
	NPM	42	ō	D	111	A	Yes		.50-81	G			
1 - Or 2-Nitropropane	PDE	30	0	A	111	A	No	N/A		G			
1,3-Pentadiene	PÉR	36	0	NA	- 111	A	No	N/A	200	G			
Perchloroethylene	PEB	7 2	0	E	16	A	Yes		.55-1(e)	G			
Polyethylene polyamines									.55-1(c)	G			
so-Propanolamine	MPA		0	E	111	A	Yes		56-1(b). (c)	6			
Propanolamine (iso-, n-)	PAX	8	0	E	III	Α.	Yes			G			
iso-Propylamine	IPP	7	0	A	II.	A	Yes		55-1(c)				
Pyridine	PRD	9	0	С	Ш	Α	Yes		.55-1(e)	G			
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxide)	SAP		0		III	Α	No	N/A		G			
Sodium aluminate solution (45% or less)	SAU	5	0	NA	III	Α	No	N/A	· · · · · · · · · · · · · · · · · · ·	G			
Sodium chlorate solution (50% or less)	SDD	0 1.	2 0	NA	Ш	Α	No	N/A	.50-73	G			
Sodium hypochlorite solution (20% or less)	SHQ	5	0	NA	III	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	101	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	(1)	Α	No	N/A	.50-73, .55-1(b)	G			
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1.	<sup>2</sup> O	NA	- II	Α	No	N/A	.50-73, .55-1(b)	G			
Styrene (crude)	STX		0	D	III	Α	Yes	2	No	G			
Styrene monomer	STY	30	0	D	111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
1,1,2,2-Tetrachloroethane	TEC	36	0	NA	10	Α	No	N/A	No	G			
Tetraethylenepentamine	TTP	7	0	Е	Ш	Α	Yes	: 1	.55-1(c)	G			
Tetrahydrofuran	THE	41	0	С	Ш	Α	Yes	1	.50-70(b)	G			
Toluenediamine	TDA	9	0	Ε	II	Α	No	N/A	.50-73, .56-1(e), (b), (c), (g)	G			
1,2,4-Trichlorobenzene	тсв	36	0	Ε	III	Α	Yes	s 1	No	G			
1,1,2-Trichloroethane	TCN		0	NA	10	Α	Yes	3 1	.50-73, .56-1(a)	G			
Trichloroethylene	TCL		0	NA	OI.	Α	Yes	3 1	No	G			
1,2,3-Trichloropropane	TCN		0	Ε	II	Α	Yes		.50-73, .56-1(a)	G			
Triethanolamine	TEA		0	E	III	Α	Yes		.55-1(b)	G			
Triethylamine	TEN		0	С	11	Α	Yes		.55-1(a)	G			
Triethylenetetramine	TET			E	10	- A	Yes		.55-1(b)	G			
Triphenylborane (10% or less), caustic soda solution	TPB		0	NA.	- 10	A	No		.56-1(a), (b), (c)	G			
	TSP		ō	NA	III	A	No			G			
Trisodium phosphate solution Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS		0	NA	111	A	No			G			
	VBL		-0	NA NA	111		No			G			
Vanillin black liquor (free alkali content, 3% or more).			0	C	111	Â	Ye		.50-70(a) .50-81(a) (b)	G			
Vinyl acetate	VAN									G			
Vinyl neodecanate	VNE	13	0	E	- 18	Α	No	N//	radmir on a right fall				



Cargo Authority Attachment

Vessel Name: CTCO 321 Official #: 1247210

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Shipyard: West Gulf Marine

Serial #: C1-1301546

10-May-13

Cargo Identification	n					<u></u>	1	Condi	tions of Carriage	
	l						Vapor F	Recovery		
Nam <del>e</del>	Chem Code	Compat Group No	Sub Chapter	Grade	Huti Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Perio
Subchapter D Cargoes Authorized for Vapor Contr	rol									Pelio
Acetone	ACT	18 <sup>2</sup>	D	С						
Acetophenone	ACP	18	D	E		A	Yes	1		
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E		Α .	Yes	1		
Atcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	E		A	Yes	1		
Amyi acetate (all isomers)	AEC	34	D			Α	Yes	1		
Amyl alcohol (iso-, n-, sec- primary)	AAI	20	D	D		A	Yes	1		
Benzyl alcohol	BAL	21	D	E		. A	Yes	1		
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, and their borate esters)	BFX	20	D	E		A	Yes	1		
Butyl acetate (all isomers)	BAX	34	_							
Butyl alcohol (iso-)	IAL	20 2	_D	<u>D</u>		A	Yes	1		
Butyl alcohol (n-)	BAN		D	D		A	Yes	1		
Butyl aicohol (sec-)	BAS	20 2	D	D		A	Yes	1		
Butyl alcohol (tert-)	BAT	20 2	D	C		Α	Yes	1		
Butyl benzyl phthalate	BPH		D	С		Α	Yes	_ 1		
Butyl toluene	BUE	34	D	E		Α	Yes	1		
Caprolactam solutions	CLS	32	D	D		Α	Yes	1		
Cyclohexane		22	D	E		Α	Yes	1		
Cyclohexanol	CHX	31	D	C		Α	Yes	1		
1,3-Cyclopentadiene dimer (molten)	CHN	20	D	E		A	Yes	1		
p-Cymene	CPD	30	D	D/E		Α	Yes	2		
iso-Decaldehyde	CMP	32	D	D		Α	Yes	_ 1		
n-Decaldehyde	IDA	19	D	E		A	Yes	1		
Decene	DAL	19	D	E		Α	Yes	1		
Decyl alcohol (all isomers)	DCE	30	D	D		Α	Yes	1		
n-Decylbenzene, see Alkyl(C9+)benzenes	DAX	20 <sup>2</sup>	D	E		A	Yes	1		
Diacetone alcohol	DBZ	32	D	E		Α	Yes	1		
ortho-Dibutyl phthalate	DAA	20 <sup>2</sup>	D	D		_A	Yes	1		
Diethylbenzene	DPA	34	D	E		Α	Yes	1		
Diethylene glycol	DEB	32		D		Α	Yes	1		1.55
Diisobutylene	DEG	40 <sup>2</sup>	D	E		Α	Yes	1		
Diisobutyl ketone	DBL	30		<u> </u>		Α	Yes	1		
Diisopropylbenzene (all isomers)	DIK	18	D	D		Α	Yes	1		
Dimethyl phthalate	DIX	32		E		Α	Yes	1		
Dioctyl phthalate	DTL	34		E		Α	Yes	1		
Dipentene	DOP	34	D	E		Α	Yes	1		
Diphenyl	DPN	30	D	D		Α	Yes	1		
Diphenyl, Diphenyl ether mixtures	DIL	32	D	D/E		Α	Yes	1		
Diphenyl ether	DDO	33	D	E		Α	Yes	_1		10221
	DPE	41	D ·	(E)		Α	Yes	1		
Dipropylene glycol Distillates: Flashed feed stocks	DPG	40	D	E		Α	Yes	1		
Distillates: Straight run	DFF	33	D	E		Α	Yes	1		
Dodecene (all isomers)	DSR	33	D I	E		A	Yes	1		
	DOZ	30	D I	D		Α	Yes	1		1000
Dodecylbenzene, see Alkyl(C9+)benzenes 2-Ethoxyethyl acetate	DDB	32	D I	Ε		Α	Yes	1		
z-Euroxyemyr acetate  Ethoxy triglycol (crude)	EEA	34	ו ס	0		Α	Yes	1		
Euroxy angrycus (crude)	ETG	40	D I	E		Α	Yes	1		



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Dated: 10-May-13

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 321 Official #: 1247210

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Shipyard: West Gulf Marine

Cargo Identification	חי					Conditions of Carriage							
					17		Vapor I	Recovery		$\top$			
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Huli Type	Tank Group	App'd (Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Perio			
Ethyl acetate	ETA	34	D	С		Α	Yes	1					
Ethyl acetoacetate	EAA	34	D	Е		Α	Yes	1					
Ethyl alcohol	EAL	20 <sup>2</sup>	D	С		Α	Yes	1					
Ethylbenzene	ETB	32	D	С		Α	Yes	1					
Ethyl butanol	EBT	20	D	D		Α	Yes	1	-14				
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	Ε		Α	Yes	1					
Ethylene glycol butyl ether acetate	EMA	34	D	E		Α	Yes	1					
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	Đ	D		Α	Yes	1					
2-Ethylhexanol	EHX	20	D	E		A	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		A	Yes	1					
Furfuryl alcohol	FAL	20 <sup>2</sup>	D	E		A	Yes	1					
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		A	Yes	1					
Gasoline blending stocks: Reformates	GRF	33	D	A/C		A	Yes	1					
Gasolines: Automotive (containing not over 4.23 grams lead per	GAT	33	D	c		A	Yes	1					
gallon)	GAV	33	D	С		A	Yes	1					
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)													
Gasolines: Casinghead (natural)	GCS	33	D	A/C		A	Yes	1					
Gasolines: Polymer	GPL	33	D	A/C		A	Yes	1					
Gasolines: Straight run	GSR	33	D	A/C		Α	Yes	1					
Glycerine	GCR	20 <sup>2</sup>	D	E		Α	Yes	1					
Heptane (all isomers), see Alkanes (C6-C9) (all isomers)	HMX	31	D	С		Α	Yes	1					
Heptanoic acid	HEP	4	D	Е		Α	Yes	1					
Heptanol (all isomers)	HTX	20	D	D/E		Α	Yes	1					
Heptene (all isomers)	HPX	30	D	С		Α	Yes	2					
Heptyl acetate	HPE	34	D	E		Α	Yes	1					
Hexane (all isomers), see Alkanes (C6-C9)	HXS	31 <sup>2</sup>	D	B/C		Α	Yes	1					
Hexanoic acid	HXO	4	D	Ε		Α	Yes	1					
Hexanoi	HXN	20	D	D		Α	Yes	1					
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2					
Hexylene glycol	HXG	20	D	Ε		Α	Yes	1					
Isophorone	IPH	18 <sup>2</sup>	D	Е		Α	Yes	1					
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	D	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		D	D		Α	Yes						
Methylamyl alcohol	MAA		D	D		A	Yes						
Methyl amyl ketone	MAK		D	D		Α	Yes						
Methyl tert-butyl ether	MBE	41 2	D	С		A	Yes						
Methyl butyl ketone	MBK		D	c		A	Yes						



Cargo Authority Attachment

Vessel Name: CTCO 321 Official #: 1247210

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Shipyard: West Gulf Marine

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Cargo Identific	atiON				- 22		_		tions of Carriage	22
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	App'd	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mattls of	Insp.
Methyl butyrate	MBU	34	D	С	-	A	Yes	1		Tollo
Methyl ethyl ketone	MEK	18 2	D	C		Ā	Yes			
Methyl heptyl ketone	MHK	18	D	D		A	Yes	1		
Methyl isobutyl ketone	MIK	18 <sup>2</sup>	D	C		Â	Yes			
Methyl naphthalene (molten)	MNA	32	D	E		Â	Yes	1		
Mineral spirits	MNS	33	D	D		Ā	Yes	1		
Myrcene	MRE	30	D	D		Ä	Yes	1		
Naphtha: Heavy	NAG	33	D	#		Ā	-			
Naphtha: Petroleum	PTN	33	0	#	_	A	Yes	1		
Naphtha: Solvent	NSV	33	D	D			Yes	1 1		
Naphtha: Stoddard solvent	NSS	33	D	D		A	Yes	1		
Naphtha: Varnish makers and painters (75%)	NVM	33	D	С		A	Yes			
Nonane (all isomers), see Alkanes (C6-C9)	NAX	31				A	Yes	1		
Nonene (all isomers)	NON		D	D		A	Yes	1		
Nonyl alcohol (all isomers)		30 20 <sup>2</sup>	D	D		A	Yes	2		
Nonyl phenol	NNS		D	E		A	Yes	1		
Nonyl phenol poly(4+)ethoxylates	NNP	21	D	E		A	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	NPE	40	D	E		Α	Yes	1		
Octanoic acid (all isomers)	OAX	31	D	C		A	Yes	1		
Octanol (all isomers)	OAY	4	D	E		Α	Yes	1		
	OCX	20 <sup>2</sup>	D	E		Α	Yes	1		
Octene (all isomers) Oil, fuel: No. 2	OTX	30	D	¢		Α	Yes	2		
Oil, fuel: No. 2-D	OTW	33	D	D/E		Α	Yes	1		
	OTD	33	D	D		Α	Yes	1		
Oil, fuel: No. 4	OFR	33	D	D/E		A	Yes	1		
Oil, fuel: No. 5	OFV	33	D	D/E		Α	Yes	1		
Oil, fuel: No. 6	OSX	33	D	Ε		A	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		
Pentane (all isomers)	PTY	31	D	A		Α	Yes	5		
Pentene (all isomers)	PTX	30	D	Α		Α	Yes	5		
n-Pentyl propionate	PPE	34	D	D		Α	Yes	1		
alpha-Pinene	PIQ	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		
Poły(2-8)alkylene glycol monoalkyl(C1-C6) ether acetate	PAF	34	D	E		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	200	Α	Yes	1		
n-Propyl acetate	PAT	34	D	С	-	Α	Yes	1		-
iso-Propyl atcohol	ſΡA	20 <sup>2</sup>	D	С		Α	Yes	1		
n-Propyl alcohol	PAL	20 <sup>2</sup>	D	С		Α	Yes	1		-
Propylbenzene (all isomers)	PBY	32	D	D		Α	Yes	1		
so-Propylcyclohexane	IPX	31	D	D		Α	Yes	1		
Propylene glycol	PPG	20 <sup>2</sup>	D	E		Α	Yes	1		



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Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 321 Official #: 1247210

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Shipyard: West Gulf Marine

Cargo Identific	ation					Conditions of Carriage							
	1						Vapor F	Recovery		T			
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	(Y or N)	VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp. Pence			
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	Ε		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	Ð	Е		Α	Yes	1					
Triethylene glycol	TEG	40	D	E		Α	Yes	1					
Triethyl phosphate	TPS	34	D	E		Α	Yes	1					
Trimethylbenzene (all isomers)	TRE	32	D	{D}		Α	Yes	1					
Trixylenyl phosphate	TRP	34	D	Е		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					





Cargo Authority Attachment

Vessel Name: CTCO 321 Official #: 1247210

Shipyard: West Gulf Mari

Serial #: C1-1301546

10-May-13

Hull #: 234

Dated

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

Cargo Identification

Chem Code попе

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

Compatability Group No.

The cargo reactive group number assigned for compatibility determinations in 48 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 CPC 1372-1425.

Note 1 Note 2

See Appendix I to 48 CFR Part 150 - excaptions to the compatability chart

Subchanter D 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 48 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

A. B. C. Note 4 lammable liquid cargoes, as defined in 46 CFR 30-10.22.

Flammable liquid cargoes, as defined in 46 CFR 30-10-24.

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.

Hull Type

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

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

Designed to carry products which require significant preventive measures to preduce the uncontrolled release of 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

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 Vapor Recovery 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 (48 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

(Polymerizas) Polymerization and residue build-up of these cargoes can adversely affect the vessel by fouling safety componenets and restricting vapor flow which could lead to cargo tank overpressurization. The vessel's owner must develop a method of ensuring all VCS safety components are functional and polymer build-up is not causing an unsafe condition due to increased pressure in the vapor control piping and cargo tanks. The method shall be acceptable to the local Officer in Charge, Marine Inspection. This is in addition to the requirements of Category 1. Please note that a material not normally considered a monomer can be a problem in detonation arrester.

Category 3

Category 2

(Highly toxic) VCSs for these toxic cargoes cannot use a spill valve or rupture disk as the primary means to meet the overfilt protection requirement of 46 CFR 39.20-9. This requirement is in addition to the requirements of Category 1.

(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