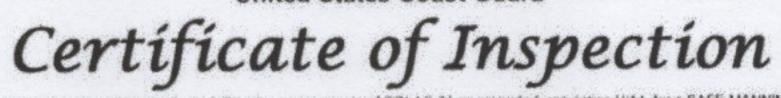


## United States of America Department of Homeland Security United States Coast Guard

Certification Date: 16 Sep 2019
Expiration Date: 16 Sep 2024



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

Vessel Name			Official Number	IMO Num	bes	Calf Sign	Service	
KIRBY 270	17		1247215				Tank E	Barge
Hading Port			Hull Material	Horsi	power	Propulsion		
HOUMA, L	A		Steel					
UNITED S	TATES							
Place Built			Delivery Date	Keel Laid Date	Gross Tons	Net Tons	DWT	Length
GALVEST	NC		02Jul2014	10Mar2014	R-1619	R-1619 I-		R-297.5
		CONTRACTOR OF THE PARTY OF THE		1835 Chan		77530		
This vessel 0 Certified L	must be mann ifeboatmen, 0	ed with the foll Certified Tank	owing licensed ermen, 0 HSC	and unlicensed Type Rating, a	Personnel and 0 GMDS	. Included in w SS Operators.	hich there m	ust be
O Mata Circ	Mates les rst Class Pilot	0 Licensed Mat 0 First Class Pi 0 Radio Officer 0 Able Seamen 0 Ordinary Sea 0 Deckhands	lots 0 First / s 0 Secon 0 Third men 0 Licens 0 Qualif	Engineers Assistant Engineer ad Assistant Engin Assistant Enginee sed Engineers fied Member Engin	eers rs			
In addition, I	his vessel may	carry 0 Passe	engers, 0 Other	Persons in cre	w, 0 Persor	ns in addition to	crew, and r	no Others. Total
Lakes, Also, in fa Carrabelle, This barge if this bar using salt This tank b Inspection ***SEE NE	ir weather o Florida.  has been grage is operat water intervarge is part Program (TBS	nly, limited nted a fresh ed in salt wa als and the cicipating in IP). Inspecti	coastwise not water service ter more than ognizant OCN	e examination n 6 months in I notified in nd Ninth Coas s aboard this	interval any 12 mo writing a t Guard Di barge sha	in accordance nth period, to s soon as thi strict's Tank ll be conduct	with 46 Cl he vessel n s change in Barge Stre ed in accor	er in Charge, Marine
Inspection S	regulations or	eans certified there	under.	il respector is a		1 IA	cable vessel	er in Charge, Marine inspection laws and
Date	Annual/Pe	riodic/Re-Insp	ection Signatur	re .	M.N.	OCHEAN CO	MANDER	by direction
7-13-21	How TBSIF	4 200	Murphy Br Scott Him	10	cer in Charge, Ma		lew Orleans	
8-51-22	orange 1%	A	Dillon Bern	inst	section Zone			
8/30/23	BTR.LA	A	Daylan lac	osh _				



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

Certification Date: 16 Sep 2019 **Expiration Date:** 16 Sep 2024

## Certificate of Inspection

Vessel Name: KIRBY 27017

Tank Barge Action Plan (TAP). Inspection issues concerning this barge should be directed to Sector Houston-Galveston OCMI.

### ---Hull Exams---

Exam Type

Next Exam

Last Exam

Prior Exam

DryDock

02Jul2024

02Jul2014

Internal Structure

31Jul2024

29Aug2019

02Jul2014

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

Authorization:

Grade "A" and lower and specified hazardous cargoes.

**Total Capacity** 

Highest Grade Type Part151 Regulated Part153 Regulated

Part154 Regulated

28198

Barrels

Yes

No

No

### \*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	LBS
II	3849	10ft 3in	13.58	R
Ш	4221	11ft Oin	13.58	LBS
III	4221	11ft Oin	13.58	R

#### \*Conditions Of Carriage\*

Only those specified hazardous cargoes named in the vessel's Cargo Authority Attachment (CAA), Serial C1-1302230, dated June 26, 2013 and Grade "A" and lower cargoes 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 compatibility group numbers from the "COMPAT GRP" column listed in the vessel's CAA.

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

When the vessel is carrying cargoes containing greater than 0.5% benzene, the Person In Charge is responsible for ensuring the provisions of 46 CFR 197, Subpart C are applied.

### \*Stability and Trim\*

Cargo tanks must be loaded uniformly whenever a 46 CFR Subchapter "O" cargo is carried; for trim purposes, the weight of cargo in each tank may exceed the uniformly loaded tank cargo weight by at most 5 percent.

\*Vapor Control Authorization\*

In accordance with 46 CFR 39, excluding 46 CFR 39,4000, this vessel's vapor control system has been inspected to the plans

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

Page 2 of 3



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

Certification Date: 16 Sep 2019 Expiration Date: 16 Sep 2024

## Certificate of Inspection

Vessel Name: KIRBY 27017

approved by Marine Safety Center letter Serial C1-1301848 dated June 11, 2013 and the list of authorized cargoes on the CAA, Serial C1-1301848 dated June 11, 2013 and found acceptable for collection of bulk liquid cargo vapors annotated with "Yes" in the CAA's VCS column.

Cargo tank maximum design working pressure: 6.32 psig

In accordance with 46 CFR Part 39.1017 and 39.5001(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.

## --- Inspection Status ---

## \*Cargo Tanks\*

	Internal Exam			External Exam		
Tank Id	Previous	Last	Next	Previous	Last	Next
1 P/S	-	02Jul2014	02Jul2024	-	-	-
2 P/S	-	02Jul2014	02Jul2024	-	-	-
3 P/S	-	02Jul2014	02Jul2024	-	-	-
			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

B-II

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



Dated:

Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 356 Official #: 1247215

Shipyard: West Gulf Marine

C1-1302230

26-Jun-13

Hull #: 239

46 CFR 151 Tank	Group	Chara	cteris	tics													
Tank Group Information	Cargo	Identificat	ion		Cargo		Tanks		Carg Tran		Enviror Control	nmental I	Fire	Special Require	ements		
Tnk Grp Tanks in Group	Density	Press.	Temp.	Hull Typ	Seg Tank	_	Vent	Gauge	Pipe Class	Cont	Tanks	Handling Space	Protection Provided	General	Materials of Construction	Elec Haz	Temp Cont
A #1P/S, #2P/S, #3P/S	13.6	Atmos.	Amb.	II	1ii 2ii	Integral Gravity	PV	Closed	н	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						
							Vapor Re					
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	Ш	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	II	Α	Yes	1	No	G		
Alkyl(C7-C9) nitrates	AKN	34 2	0	NA	Ш	Α	No	N/A	.50-81, .50-86	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	111	Α	No	N/A	.50-73, .56-1(a), (b), (c)	G		
Ammonium hydroxide (28% or less NH3)	AMH	6	0	NA	Ш	Α	No	N/A	.56-1(a), (b), (c), (f), (g)	G		
Anthracene oil (Coal tar fraction)	AHO	33	0	NA	H	Α	No	N/A	No	G		
Benzene	BNZ	32	0	С	Ш	Α	Yes	1	.50-60	G		
Benzene or hydrocarbon mixtures (having 10% Benzene or more)	внв	32 <sup>2</sup>	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	Ш	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	Ш	Α	Yes	1	.50-60	G		
Butyl acrylate (all isomers)	BAR	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Butyl methacrylate	ВМН	14	0	D	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G		
Butyraldehyde (all isomers)	BAE	19	0	С	111	Α	Yes	1	.55-1(h)	G		
Camphor oil (light)	СРО	18	0	D	11	Α	No	N/A	No	G		
Carbon tetrachloride	CBT	36	0	NA	Ш	Α	No	N/A	No	G		
Caustic potash solution	CPS-	5 <sup>2</sup>	0	NA	III	Α	No	N/A	.50-73, .55-1(j)	G		
Caustic soda solution	CSS	5 <sup>2</sup>	0	NA	111	Α	No	N/A	.50-73, .55-1(j)	G		
Chemical Oil (refined, containing phenolics)	COD	21	0	E	11	Α	No	N/A	.50-73	G		
Chlorobenzene	CRB	36	0	D	Ш	Α	Yes	1	No	G		
Chloroform	CRF	36	0	NA	111	Α	Yes	3	No	G		
Coal tar naphtha solvent	NCT	33	0	D	III	Α	Yes	1	.50-73	G		
Creosote	CCW	21 2	0	Ε	Ш	Α	Yes	1	No	G		
Cresols (all isomers)	CRS	21	0	E	111	Α	Yes	1	No	G		
Cresylate spent caustic	CSC	5	0	NA	III	Α	No	N/A	.50-73, .55-1(b)	G		
Cresylic acid tar	CRX		0	E	111	Α	Yes	1	.55-1(f)	G		
Crotonaldehyde	CTA	19 <sup>2</sup>	0	С	Н	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	0	D	III	Α	Yes	1	.56-1(a), (b)	G		
Cyclohexanone, Cyclohexanol mixture	CYX	18 <sup>2</sup>	0	E	Ш	Α	Yes	1	.56-1 (b)	G		
Cyclohexylamine	СНА	7	0	D	Ш	Α	Yes	1	56-1(a), (b), (c), (g)	G		
Cyclopentadiene, Styrene, Benzene mixture	CSB	30	0	D	Ш	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.



Certificate of Inspection

## Cargo Authority Attachment

Vessel Name: CTCO 356
Official #: 1247215

Page 2 of 8

Shipyard: West Gulf Marine

Dated:

C1-1302230

26-Jun-13

Cargo Identification	n						(	Condi	tions of Carriage	
								ecovery		
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
iso-Decyl acrylate	IAI	14	0	Е	III	Α	Yes	2	.50-70(a), .50-81(a), (b), .55-1(c)	G
Dichlorobenzene (all isomers)	DBX	36	0	E	Ш	Α	Yes	3	.56-1(a), (b)	G
1,1-Dichloroethane	DCH	36	0	С	Ш	Α	Yes	1	No	G
2,2'-Dichloroethyl ether	DEE	41	0	D	II	Α	Yes	1	.55-1(f)	G
Dichloromethane	DCM	36	0	NA	- 111	Α	Yes	5	No	G
2,4-Dichlorophenoxyacetic acid, diethanolamine salt solution	DDE	43	0	E	111	Α	No	N/A	.56-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, dimethylamine salt solution	DAD	0 1,2	0	Α	Ш	Α	No	N/A	.56-1(a), (b), (c), (g)	G
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt solution	DTI	43 2	0	E	Ш	Α	No	N/A	.56-1(a), (b), (c), (g)	G
1,1-Dichloropropane	DPB	36	0	С	Ш	Α	Yes	3	No	G
1,2-Dichloropropane	DPP	36	0	С	111	Α	Yes	3	No	G
1,3-Dichloropropane	DPC	36	0	С	111	Α	Yes	3	No	G
1,3-Dichloropropene	DPU	15	0	D	11	Α	Yes	4	No	G
Dichloropropene, Dichloropropane mixtures	DMX	15	0	С	11	Α	Yes	1	No	G
Diethanolamine	DEA	8	0	E	Ш	Α	Yes	1	.55-1(c)	G
Diethylamine	DEN	7	0	С	III	Α	Yes	3	.55-1(c)	G
Diethylenetriamine	DET	7 <sup>2</sup>	0	E	111	Α	Yes	1	.55-1(c)	G
Diisobutylamine	DBU	7	0	D	III	Α	Yes	3	.55-1(c)	G
Diisopropanolamine	DIP	8	0	Е	111	Α	Yes	1	.55-1(c)	G
Diisopropylamine	DIA	7	0	С	11	Α	Yes	3	.55-1(c)	G
N,N-Dimethylacetamide	DAC	10	0	E	111	Α	Yes	3	.56-1(b)	G
Dimethylethanolamine	DMB	8	0	D	III	Α	Yes	1	.56-1(b), (c)	G
Dimethylformamide	DMF	10	0	D	III	Α	Yes	1	.55-1(e)	G
Di-n-propylamine	DNA	7	0	С	II	Α	Yes	3	.55-1(c)	G
Dodecyldimethylamine, Tetradecyldimethylamine mixture	DOT	7	0	E	III	Α	No	N/A	.56-1(b)	G
Dodecyl diphenyl ether disulfonate solution	DOS	43	0	#		Α	No	N/A	No	G
EE Glycol Ether Mixture	EEG	40	0	 D	III	A	No	N/A	No	G
Ethanolamine	MEA	8	0	E	III	Α	Yes	1	.55-1(c)	G
Ethyl acrylate	EAC	14	0		111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G
Ethylamine solution (72% or less)	EAN	7	0	A	 	A	No	N/A	.55-1(b)	G
N-Ethylbutylamine	EBA	7	0	D	 III	A	Yes	3	.55-1(b)	
N-Ethylcyclohexylamine	ECC	7	0	D	111	A	Yes	1	.55-1(b)	G
Ethylene cyanohydrin	ETC	20	0	E	111	A	Yes	1	No	G
Ethylenediamine	EDA	7 2	0				Yes	1	.55-1(c)	
Ethylene dichloride	EDC	36 <sup>2</sup>	0	C	 III	A	Yes	1	No	G
Ethylene glycol hexyl ether	EGH	40	0	E					No	G
Ethylene glycol monoalkyl ethers	EGC	40	0			A	No	N/A	No	G
Ethylene glycol monoakyl ethers  Ethylene glycol propyl ether	EGP	40	0	D/E E	111	A	Yes	1	No	
2-Ethylhexyl acrylate	EAI	14	0	E	- 111	Α	Yes	1	.50-70(a), .50-81(a), (b)	G
Ethyl methacrylate	ETM	14	0	D/E	111	A	Yes	2	.50-70(a)	
2-Ethyl-3-propylacrolein	EPA	19 <sup>2</sup>	0	E		A	Yes	1	No	
	FMS	19 <sup>2</sup>				A	Yes		.55-1(h)	G
Formaldehyde solution (37% to 50%) Furfural	FFA	19 -	0	D/E D		Α	Yes	1	.55-1(h)	
Glutaraldehyde solution (50% or less)						A	Yes	1 N/A	No No	G
•	GTA	19	0	NA		Α	No	N/A		G
Hexamethylenediamine solution	HMC	7	0	E	-	A	Yes	1	.55-1(c)	
Hexamethyleneimine	HMI	7	0	С	11	A	Yes	1	.56-1(b), (c)	
Hydrocarbon 5-9	HFN	00	0	C	- 111	A	Yes	1	.50-70(a), .50-81(a), (b)	G
Isoprene	IPR	30	0	A		A	No	N/A	.50-70(a), .50-81(a), (b)	G
Isoprene, Pentadiene mixture	IPN		0	В	111	Α	No	N/A	.50-70(a), .55-1(c)	G



Serial #: C1-1302230

Dated: 26-Jun-13

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 356

Official #: 1247215

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Shipyard: West Gulf Marine

Cargo Identification	ľ					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			
Kraft 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			
Methyl acrylate	MAM	14	0	С	Ш	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Methylcyclopentadiene dimer	MCK	30	0	С	111	Α	Yes	1	No	G			
Methyl diethanolamine	MDE	8	0	E	111	Α	Yes	1	.56-1(b), (c)	G			
2-Methyl-5-ethylpyridine	MEP	9	0	E	Ш	Α	Yes	1	.55-1(e)	G			
Methyl methacrylate	MMN	I 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	Ш	Α	Yes	1	.55-1(c)	G			
Nitroethane	NTE	42	0	D	11	Α	No	N/A	.50-81, .56-1(b)	G			
1- or 2-Nitropropane	NPM	42	0	D	Ш	Α	Yes	1	.50-81	G			
1,3-Pentadiene	PDE	30	0	Α	111	Α	No	N/A	.50-70(a), .50-81	G			
Perchloroethylene	PER	36	0	NA	Ш	Α	No	N/A	No	G			
Polyethylene polyamines	PEB	7 2	0	E	III	A	Yes	1	.55-1(e)	G			
iso-Propanolamine	MPA	8	0	E	III	A	Yes	1	.55-1(c)	G			
Propanolamine (iso-, n-)	PAX	8	0	E	III	A	Yes	1	.56-1(b), (c)	G			
iso-Propylamine	IPP	7	0	Α		A	Yes	5	.55-1(c)	G			
Pyridine	PRD	9	0	C	 	A	Yes	1	.55-1(e)	G			
Sodium acetate, Glycol, Water mixture (3% or more Sodium Hydroxid		3	0		 	A	No	N/A	.50-73, .55-1(j)	G			
Sodium aluminate solution (45% or less)	SAU	5	0	NA	 	A	No	N/A	.50-73, .56-1(a), (b), (c)	G			
	SDD	0 1,2		NA	 	A		N/A	.50-73	G			
Sodium chlorate solution (50% or less)	SHQ	-	0				No		.50-73, .56-1(a), (b)	G			
Sodium hypochlorite solution (20% or less)	SSH	5 0 1,2		NA		A	No	N/A	.50-73, .55-1(b)	G			
Sodium sulfide, hydrosulfide solution (H2S 15 ppm or less)  Sodium sulfide, hydrosulfide solution (H2S greater than 15 ppm but	SSI	0 1,2		NA NA	III	A	Yes No	1 N/A	.50-73, .55-1(b)	G			
less than 200 ppm)	001	0 1,2	0	NIA	- 11		NI-	NI/A	.50-73, .55-1(b)	G			
Sodium sulfide, hydrosulfide solution (H2S greater than 200 ppm)	SSJ	0 1,2		NA	11	A	No	N/A	No	G			
Styrene (crude)	STX	20	0	D	- 111	Α	Yes	2	.50-70(a), .50-81(a), (b)	G			
Styrene monomer	STY	30	0	D		A .	Yes	2	No	G			
1,1,2,2-Tetrachloroethane	TEC	36	0	NA		A	No	N/A	.55-1(c)	G			
Tetraethylenepentamine	TTP	7	0	E		A	Yes	1	.50-70(b)	G			
Tetrahydrofuran	THF	41	0	C		A	Yes	1					
Toluenediamine	TDA	9	0	E		Α .	No	N/A	.50-73, .56-1(a), (b), (c), (g)				
1,2,4-Trichlorobenzene	TCB	36	0	E	111	A	Yes	1	No				
1,1,2-Trichloroethane	TCM	36	0	NA	111	Α .	Yes	1	.50-73, .56-1(a)	G			
Trichloroethylene	TCL	36 <sup>2</sup>	0	NA	III	Α	Yes	1	No	G			
1,2,3-Trichloropropane	TCN	36	0	E	11	Α	Yes	3	.50-73, .56-1(a)	G			
Triethanolamine	TEA	8 2	0	E	III	Α	Yes	1	.55-1(b)	G			
Triethylamine	TEN	7	0	С		ΑΑ	Yes	3	.55-1(e)	G			
Triethylenetetramine	TET	7 2	0	E	111	Α	Yes	1	.55-1(b)	G			
Triphenylborane (10% or less), caustic soda solution	TPB	5	0	NA	111	Α	No	N/A	.56-1(a), (b), (c)	G			
Trisodium phosphate solution	TSP	5	0	NA	III	Α	No	N/A	.50-73, .56-1(a), (c).	G			
Urea, Ammonium nitrate solution (containing more than 2% NH3)	UAS	6	0	NA	III	Α	No	N/A	.56-1(b)	G			
Vanillin black liquor (free 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	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			
Vinyltoluene	VNT	13	0	D	111	Α	Yes	2	.50-70(a), .50-81, .56-1(a), (b), (c), (	G			



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26-Jun-13

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 356

Official #: 1247215 Page 4 of 8 Shipyard: West Gulf Marine

Cargo Identificatio	n							Condi	tions of Carriage	
		_						Recovery		
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
Subchapter D Cargoes Authorized for Vapor Contr	ol									
Acetone	ACT	18 <sup>2</sup>	D	С		Α	Yes	1		
Acetophenone	ACP	18	D	E		Α	Yes	1		
Alcohol(C12-C16) poly(1-6)ethoxylates	APU	20	D	E		Α	Yes	1	N. A. C.	
Alcohol(C6-C17)(secondary) poly(7-12)ethoxylates	AEB	20	D	Е		Α	Yes	1		
Amyl acetate (all isomers)	AEC	34	D	D		Α	Yes	1		
Amyl alcohol (iso-, n-, sec-, primary)	AAI	20	D	D		Α	Yes	1		
Benzyl alcohol	BAL	21	D	E		Α	Yes	1		
Brake fluid base mixtures (containing Poly(2-8)alkylene(C2-C3) glycols, Polyalkylene(C2-C10) glycol monoalkyl(C1-C4) ethers, 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 2	D	D		Α	Yes	1	And the second s	
Butyl alcohol (n-)	BAN	20 2	D	D		Α	Yes	1		
Butyl alcohol (sec-)	BAS	20 2	D	С		Α	Yes	1		
Butyl alcohol (tert-)	BAT		D	С		Α	Yes	1		-
Butyl benzyl phthalate	BPH	34	D	E		Α	Yes	1		
Butyl toluene	BUE	32	D	D		Α	Yes	1		
Caprolactam solutions	CLS	22	D	E		Α	Yes	1		
Cyclohexane	CHX	31	D	С		Α	Yes	1		
Cyclohexanol	CHN	20	D	E		Α	Yes	1		
1,3-Cyclopentadiene dimer (molten)	CPD	30	D	D/E		Α	Yes	2		
p-Cymene	CMP	32	D	D	wii in	Α	Yes	1		
iso-Decaldehyde	IDA	19	D	E		Α	Yes	1		
n-Decaldehyde	DAL	19	D	Е		Α	Yes	1		
Decene	DCE	30	D	D		Α	Yes	1		
Decyl alcohol (all isomers)	DAX	20 <sup>2</sup>	D	E		Α	Yes	1		
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	Е		Α	Yes	1		
Diethylbenzene	DEB	32	D	D		Α	Yes	1	9	_
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	Е		Α	Yes	1		
Dimethyl phthalate	DTL	34	D	E		Α	Yes	1		
Dioctyl phthalate	DOP	34	D	Е		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	Е		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	E		Α	Yes	1		
Dodecene (all isomers)	DOZ	30	D	D		Α	Yes	1		
Dodecylbenzene, see Alkyl(C9+)benzenes	DDB	32	D	Е		Α	Yes	1		
2-Ethoxyethyl acetate	EEA	34	D	D		Α	Yes	1		
Ethoxy triglycol (crude)	ETG	40	D	E		Α	Yes	1		



Dated: 26-Jun-13

# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 356 Official #: 1247215

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Shipyard: West Gulf Marine

Cargo Identification	on							Condi	tions of Carriage	
	Chem	Compat	Sub		Hull	Tank	App'd	Recovery VCS	Special Requirements in 46 CFR	Insp.
Name	Code	Group No	Chapter	Grade	Туре	Group	(Y or N)	Category		Period
Ethyl acetate	ETA	34	D	С		Α	Yes	1		
Ethyl acetoacetate	EAA	34	D	E		Α	Yes	1		
Ethyl alcohol	EAL	20 2	D	С		Α	Yes	1		
Ethylbenzene	ETB	32	D	С		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		Α	Yes	1		
Ethyl cyclohexane	ECY	31	D	D		Α	Yes	1		
Ethylene glycol	EGL	20 <sup>2</sup>	D	E		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	E		Α	Yes	1		
Ethyl-3-ethoxypropionate	EEP	34	D	D		Α	Yes	1		
2-Ethylhexanol	EHX	20	D	E		Α	Yes	1		
Ethyl propionate	EPR	34	D	С	************	Α	Yes	1		
Ethyl toluene	ETE	32	D	D		Α	Yes	1		
Formamide	FAM	10	D	E		Α	Yes	1		
Furfuryl alcohol	FAL	20 <sup>2</sup>	D	E		Α	Yes	1		
Gasoline blending stocks: Alkylates	GAK	33	D	A/C		Α	Yes	1		
Gasoline blending stocks: Reformates	GRF	33	D	A/C		Α	Yes	1		
Gasolines: Automotive (containing not over 4.23 grams lead per gallon)	GAT	33	D	С		Α	Yes	1		
Gasolines: Aviation (containing not over 4.86 grams of lead per gallon)	GAV	33	D	С		Α	Yes	1		
Gasolines: Casinghead (natural)	GCS	33	D	A/C		Α	Yes	1		
Gasolines: Polymer	GPL	33	D	A/C		Α	Yes	1		
Gasolines: Straight run	GSR	33	D	A/C		Α	Yes	1		
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	НХО	4	D	E		Α	Yes	1		
Hexanol	HXN	20	D	D		Α	Yes	1		
Hexene (all isomers)	HEX	30	D	С		Α	Yes	2		
Hexylene glycol	HXG	20	D	E		Α	Yes	1		
Isophorone	IPH	18 <sup>2</sup>	D	E		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	34	D	D		Α	Yes	1		
Methylamyl alcohol	MAA	20	D	D		Α	Yes	1		
Methyl amyl ketone	MAK	18	D	D		Α	Yes	1		
Methyl tert-butyl ether	MBE	41 2	D	С		Α	Yes	1		
Methyl butyl ketone	MBK	18	D	С		A	Yes	1		



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## Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 356 Official #: 1247215

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Shipyard: West Gulf Marine

Cargo Identificatio	n							Condi	tions of Carriage	
								Recovery		
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
Methyl butyrate	MBU	34	D	С		Α	Yes	1	7	
Methyl ethyl ketone	MEK	18 <sup>2</sup>	D	С		Α	Yes	1	N.	
Methyl heptyl ketone	MHK	18	D	D		Α	Yes	1		
Methyl isobutyl ketone	MIK	18 <sup>2</sup>	D	С		Α	Yes	1		
Methyl naphthalene (molten)	MNA	32	D	E		Α	Yes	1		
Mineral spirits	MNS	33	D	D		Α	Yes	1		-
Myrcene	MRE	30	D	D		Α	Yes	1		9
Naphtha: Heavy	NAG	33	D	#		Α	Yes	1		
Naphtha: Petroleum	PTN	33	D	#		Α	Yes	1		
Naphtha: Solvent	NSV	33	D	D		Α	Yes	1		
Naphtha: Stoddard solvent	NSS	33	D	D	10.00000,00000,000000	Α	Yes	1		
Naphtha: Varnish 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	Е		Α	Yes	1		
Octane (all isomers), see Alkanes (C6-C9)	OAX	31	D	С		Α	Yes	1		
Octanoic acid (all isomers)	OAY	4	D	Е		Α	Yes	1		
Octanol (all isomers)	OCX	20 <sup>2</sup>	D	Е		Α	Yes	1		
Octene (all isomers)	ОТХ	30	D	С		Α	Yes	2		
Oil, fuel: No. 2	OTW	33	D	D/E		Α	Yes	1		
Oil, fuel: No. 2-D	OTD	33	D	D		Α	Yes	1		
Oil, fuel: No. 4	OFR	33	D	D/E		Α	Yes	1		
Oil, fuel: No. 5	OFV	33	D	D/E		Α	Yes	1		
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		
Pentane (all isomers)	PTY	31	D	Α		Α	Yes	5		
Pentene (all isomers)	PTX	30	D	Α		Α	Yes	5		
n-Pentyl propionate	PPE	34	D	D	44.47	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	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		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 <sup>2</sup>	D	С		Α	Yes	1		
Propylbenzene (all isomers)	PBY	32	D	D		Α	Yes	1		
		31	D	D		Α	Yes	1		
iso-Propylcyclohexane	IPX	31	U				165			



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# Certificate of Inspection

Cargo Authority Attachment

Vessel Name: CTCO 356 Official #: 1247215

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Shipyard: West Gulf Marine

Cargo Identifica	tion					Conditions of Carriage							
Name	Chem Code	Compat Group No	Sub Chapter	Grade	Hull Type	Tank Group	Vapor F App'd (Y or N)	Recovery VCS Category	Special Requirements in 46 CFR 151 General and Mat'ls of	Insp.			
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	Е		Α	Yes	1					
Tetrahydronaphthalene	THN	32	D	Е		Α	Yes	1					
Toluene	TOL	32	D	С		Α	Yes	1					
Tricresyl phosphate (less than 1% of the ortho isomer)	TCP	34	D	Е		Α	Yes	1					
Triethylbenzene	TEB	32	D	E		Α	Yes	1					
Triethylene glycol	TEG	40	D	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	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	G				





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Cargo Authority Attachment

Vessel Name: CTCO 356 Official #: 1247215

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Shipyard: West Gulf Mari

Hull #: 239

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

Cargo Identification

Chem Code

Compatability Group No.

Note 1

Note 2 Subchapter

Subchanter D Subchapter O

Grade

A. B. C

NA Hull Type

NΔ

The proper shipping name as listed in 46 CFR Table 30.25-1, 46 CFR Table 151.05, and 46 CFR Part 153 Table 2.

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

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

The cargo reactive group number assigned for compatibility determinations in 46 CFR Part 150 Tables I and II. In accordance with 46 CFR 150.130, the Person-in-Charge of the barge is responsible for ensuring that the compatibility requirements of 46 CFR Part 150 are met. Cargoes must be checked for compatibility using the figures, 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-Telephone (202) 372-1425

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

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

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

Those hazardous cargoes listed in 46 CFR Table 151.05 and 46 CFR Part 153 Table 2 Those cargoes listed in 46 CFR Part 153 Table 2 are non-regulated cargoes when carried in bulk on non-oceangoing barges.

The cargo classification assigned to each flammable or combustible liquid. Grades inside of "{ }" indicate a provisional assignment based upon literature sources which were not verified by manufacturers data. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.

Flammable liquid cargoes, as defined in 46 CFR 30-10.22 Combustible liquid cargoes, as defined in 46 CFR 30-10.15.

The flammability/combustibility grade of these cargoes may vary depending upon the flashpoint and Reid vapor pressure. The Person-in-Charge shall verify the cargo grade based on Manufacturers data and ensure that the barge is authorized for carriage of that grade of cargo.

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

No flammability/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 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 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 39.30-11). 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 components 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 mixture densities and vapor growth rates as compared to Category 1 cargoes. Consult the Marine Safety Center's VCS Guidelines for further information. This requirement is in addition to the requirements of Category 1.

Category 6 Category 7 (High vapor pressure and highly toxic) Must comply with requirements of Categories 1, 3 and 5. (High vapor pressure and polymerizes) Must comply with requirements of Categories 1, 2 and 5.

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