

**USCG Marine Safety Center
Tank Group Characteristics Loading Form
for Tank Vessels Subject to 2007 MARPOL Annex II Revisions**

Vessel Information

Vessel Name: _____

Official Number: _____

Shipyard: _____

Hull Number: _____

Use this form for an oceangoing US flag vessel that carries Noxious Liquid Substance (NLS) cargoes and:
Holds valid international certificates (IMO Certificate of Fitness, NLS Certificate, IOPP), or
Was built after January 1, 2007, or
Voluntarily complies with the 2007 revisions to MARPOL Annex II.

Cargo Tank Group Characteristics

(complete the following section for each tank group by filling in the requested information or choosing the appropriate characteristics)

Tank Group Designation (A, B, etc.): Tanks in group (#1P, #2S, etc.): _____

Cargo Information

Flammability Grade: A B C D E
(46 CFR 30.10-15 and 30.10-22)

Maximum Cargo Density: (lbs/gal)

NLS Category Authorized: X Y Z OS
(46 CFR 153.470 - .491)

Procedures & Arrangements (P&A) Manual Submitted to MSC: _____
(date)

Approved: _____
(date)

Other MARPOL Authority: Annex I

Cargo Tank Group Characteristics

Complete the following section for each tank group by filling in the requested information or choosing the appropriate characteristics.

Cargo Tanks

Ship Type: I II III
(46 CFR 153.230 - .232; IBC 2.1.2)

Cargo Tank Type: Pressure Gravity
Independent Integral

Cargo Tank Vent Type: Open PV High Velocity Vents
(46 CFR 153.IBC 8.3)

Cargo Tank Vent Height: B/3 6m 3m NR
(46 CFR 153.350 - .353)

Tanks - Gauging Devices: Open Restricted Closed
(IBC 13.1.1)

Cargo Tank Protection

Electrical Hazard Group: I-A I-B I-C I-D
No Electrical equipment in hazardous location

Fire Protection/Firefighting:

Complete the following section for each tank group by filling in the requested information or choosing the appropriate characteristics.

N /A - The vessel does not have a firefighting system installed (skip this section)

A - Polar Foam
 B - Non-Polar Foam

C - Water Spray System
 D - Dry Chemical

Foam System (Check one):

CHUBB National Foam Systems:		ANSUL:	Rockwood Systems:
CG Universal 6%A <input type="checkbox"/>	631A <input type="checkbox"/>	626 <input type="checkbox"/>	3X3 <input type="checkbox"/>
CG Universal 6%B <input type="checkbox"/>	631B <input type="checkbox"/>	ANSUL 16 <input type="checkbox"/>	1888 (nonpolar) <input type="checkbox"/>
CG Universal 6%C <input type="checkbox"/>	631C <input type="checkbox"/>	ANSUL 24 <input type="checkbox"/>	1889 (polar) <input type="checkbox"/>

46 CFR Part 153 Material Requirements

153.236 Prohibited Materials

153.238 Required Materials

Check all those which are **not** found in this tank group

Check all those which are found in this tank group

- (a) Aluminum
- (b) Copper
- (c) Zinc
- (d) Magnesium
- (e) Lead
- (f) Silver
- (g) Mercury

- (a) Al, SS or Steel w/tank lining
- (b) Al or SS
- (c) 304L or 316 SS
- (d) Solid Aust SS
- (e) SS or Steel w/tank lining

46 CFR Part 153 and IBC Code (2007) Special Requirements

Check those requirements that the tank group meets. Requirements in the left column can be found in 46 CFR Part 153. Requirements in the right column can be found in the International Bulk Chemical (IBC) Code

- | | |
|---|--|
| <input type="checkbox"/> .252 Independent Cargo Tank | |
| <input type="checkbox"/> .266 Tank Linings | |
| <input type="checkbox"/> .316 Pump room ventilation | <input type="checkbox"/> 15.17 Ventilation requirements |
| <input type="checkbox"/> .336 Pump room requirement | <input type="checkbox"/> 15.18 Pumproom requirements |
| <input type="checkbox"/> .355 PV venting system | |
| <input type="checkbox"/> .372 High vapor pressure reqmt | <input type="checkbox"/> 15.14 High vapor pressure cargoes |
| <input type="checkbox"/> .400 General gauging reqmts | |
| <input type="checkbox"/> .408 (all) Overflow control | <input type="checkbox"/> 15.19 Overflow control |
| <input type="checkbox"/> .408 (a) only | |
| <input type="checkbox"/> .409 High level alarms | <input type="checkbox"/> 15.19.6 High-level alarms |
| <input type="checkbox"/> .440 (all) Temperature sensors | |
| <input type="checkbox"/> .440 (a)(1) Remote thermometer | |
| <input type="checkbox"/> .440 (a)(2) Remote Secondary Thermometer | |
| <input type="checkbox"/> .465 Flammable vapor detection | |
| <input type="checkbox"/> .488 High melting point NLS | |
| <input type="checkbox"/> .500 Inert Gas System | |
| <input type="checkbox"/> .501 Dry inert gas | |
| <input type="checkbox"/> .515 Flammable cargoes | |
| <input type="checkbox"/> .602 Cargoes reactive w/water | <input type="checkbox"/> 15.15.2 Cargo contamination |

46 CFR Part 153 and IBC Code (2007) Special Requirements (continued)

Check those requirements that the tank group meets. Requirements in the left column can be found in 46 CFR Part 153. Requirements in the right column can be found in the International Bulk Chemical (IBC) Code

<input type="checkbox"/>	.525 (all) Toxic Cargoes	<input type="checkbox"/>	15.12 (all) Toxic Cargoes
<input type="checkbox"/>	.525 (a) Piping	<input type="checkbox"/>	15.12.1 Vent height
<input type="checkbox"/>	.525 (b) PV Setting > 21kPa	<input type="checkbox"/>	15.12.2 Vapor return
<input type="checkbox"/>	.525 (c) Pumps/valves	<input type="checkbox"/>	15.12.3 (all) Stowage
<input type="checkbox"/>	.525 (d) Heat Transfer	<input type="checkbox"/>	15.12.3 .2 only - Separate piping
<input type="checkbox"/>	.525 (e) Cargo Separation	<input type="checkbox"/>	15.12.4 PV setting >0.02MPa
<input type="checkbox"/>	.525 (f) Vapor Retention		
<input type="checkbox"/>	.526 Toxic vapor detectors		
<input type="checkbox"/>	.527 Toxic vapor protection		
<input type="checkbox"/>	.560 Alkyl (C7-C9) nitrates	<input type="checkbox"/>	15.3 Carbon disulfide
<input type="checkbox"/>	.520 Carbon Disulfide	<input type="checkbox"/>	15.1 Liquid sulfur
<input type="checkbox"/>	.545 Liquid Sulfur		
	Alkylene Oxides		
<input type="checkbox"/>	.530 (all)	<input type="checkbox"/>	15.8 (all)
<input type="checkbox"/>	.530 (a) Steel/stainless steel	<input type="checkbox"/>	15.8.12 Threaded joints
<input type="checkbox"/>	.530 (c) Materials	<input type="checkbox"/>	15.8.13 Cargo transfer piping
<input type="checkbox"/>	.530 (e) PV Setting	<input type="checkbox"/>	15.8.16 Independent venting
<input type="checkbox"/>	.530 (f) Cooling system	<input type="checkbox"/>	15.8.21 Tank type
<input type="checkbox"/>	.530 (g) Cargo piping	<input type="checkbox"/>	15.8.27 Nitrogen pad
<input type="checkbox"/>	.530 (m) Cargo discharge	<input type="checkbox"/>	15.8.29 Water spray system
<input type="checkbox"/>	.530 (n) Shut-offs		
<input type="checkbox"/>	.530 (o) Cargo hose		
	Acids		
<input type="checkbox"/>	.554 (a) Spray shields	<input type="checkbox"/>	15.11.1 Tank / Shell segregation
<input type="checkbox"/>	.554 (b) Cargo containment separation	<input type="checkbox"/>	15.11.2 Tank Lining
<input type="checkbox"/>	.554 (c) Leak detection	<input type="checkbox"/>	15.11.3 Plate thickness
<input type="checkbox"/>	.555 Inorganic acids	<input type="checkbox"/>	15.11.4 Spray shield/drip tray
<input type="checkbox"/>	.556 Sulfuric acid	<input type="checkbox"/>	15.11.5 Electrical req'ts
<input type="checkbox"/>	.557 Hydrochloric acid	<input type="checkbox"/>	15.11.6 Oil segregations
<input type="checkbox"/>	.558 Phosphoric acid	<input type="checkbox"/>	15.11.7 Leak detection
<input type="checkbox"/>	.559 Nitric acid	<input type="checkbox"/>	15.11.8 Corrosion-resistant