

**MAXIMUM™ STANDARD HARDENER****Safety Data Sheet MSH-US**

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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**SECTION 1: Identification****1.1. Identification**

Product form : Mixture  
 Trade name : MAXIMUM™ STANDARD HARDENER  
 Product code : MXM30

**1.2. Recommended use and restrictions on use**

Recommended use : Hardener

**1.3. Supplier**

U-POL US Inc  
 108 Commerce Way  
 Easton PA 18040 - USA  
 T 1-800-340-7824 - F 1-800-787-5150  
[technicalsupport@u-pol.com](mailto:technicalsupport@u-pol.com) - [www.u-pol.com](http://www.u-pol.com)

**1.4. Emergency telephone number**

Emergency number : CHEMTREC - 1-800-424-9300

**SECTION 2: Hazard(s) identification****2.1. Classification of the substance or mixture****GHS US classification**

Flammable liquids Category 3	Flammable liquid and vapor
Acute toxicity (inhalation:vapour) Category 4	Harmful if inhaled
Skin corrosion/irritation Category 2	Causes skin irritation
Serious eye damage/eye irritation Category 2	Causes serious eye irritation
Respiratory sensitization, Category 1	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
Skin sensitization, Category 1	May cause an allergic skin reaction
Carcinogenicity Category 2	Suspected of causing cancer
Specific target organ toxicity (single exposure) Category 3	May cause respiratory irritation
Specific target organ toxicity (repeated exposure) Category 2	May cause damage to organs through prolonged or repeated exposure
Aspiration hazard Category 1	May be fatal if swallowed and enters airways

**2.2. GHS Label elements, including precautionary statements****GHS US labeling**

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

Flammable liquid and vapor  
 May be fatal if swallowed and enters airways  
 Causes skin irritation  
 May cause an allergic skin reaction  
 Causes serious eye irritation  
 Harmful if inhaled  
 May cause an allergy or asthma symptoms or breathing difficulties if inhaled  
 May cause respiratory irritation  
 Suspected of causing cancer  
 May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) :

Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 Keep container tightly closed.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Do not breathe vapors, fume, spray.  
 Wash hands thoroughly after handling.  
 Use only outdoors or in a well-ventilated area.

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Contaminated work clothing must not be allowed out of the workplace  
Wear eye protection, protective gloves, protective clothing.  
[In case of inadequate ventilation] wear Respiratory Protection.  
If swallowed: Immediately call a doctor  
Do NOT induce vomiting.  
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
If inhaled: Remove person to fresh air and keep comfortable for breathing  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If exposed or concerned: Get medical advice/attention.  
If skin irritation or rash occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
If experiencing respiratory symptoms: Call a POISON CENTER  
Take off contaminated clothing and wash it before reuse.  
In case of fire: Use sand, foam, extinguishing powder to extinguish.  
Store in a well-ventilated place. Keep cool.  
Store locked up.  
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	GHS US classification
xylene	(CAS-No.) 1330-20-7	< 63	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304
hexamethylene diisocyanate, oligomers	(CAS-No.) 28182-81-2	23 - 43	Acute Tox. 4 (Inhalation), H332 Skin Sens. 1, H317 STOT SE 3, H335
ethylbenzene	(CAS-No.) 100-41-4	< 23	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:vapour), H332 Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304
hexamethylene-di-isocyanate	(CAS-No.) 822-06-0	< 5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center/doctor/physician if you feel unwell.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
- First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

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First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause respiratory irritation. May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor.

Reactivity : Flammable liquid and vapor.

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Protective equipment : Safety glasses. Protective clothing. Gloves.

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe vapors, spray, fume. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Contain released product. Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapors, fume, spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Storage temperature : < 25 °C

Storage area : Keep container in a well-ventilated place.

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Special rules on packaging

: Keep only in original container.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

hexamethylene diisocyanate, oligomers (28182-81-2)		
Not applicable		
hexamethylene-di-isocyanate (822-06-0)		
ACGIH	Local name	Hexamethylene diisocyanate
ACGIH	ACGIH TWA (ppm)	0.005 ppm
ACGIH	Remark (ACGIH)	URT irr; resp sens
ACGIH	Regulatory reference	ACGIH 2018
xylene (1330-20-7)		
ACGIH	Local name	Xylene, mixed isomers (Dimethylbenzene)
ACGIH	ACGIH TWA (ppm)	100 ppm
ACGIH	ACGIH STEL (ppm)	150 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
ACGIH	Regulatory reference	ACGIH 2019
OSHA	OSHA PEL (TWA) (mg/m³)	435 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
ethylbenzene (100-41-4)		
ACGIH	Local name	Ethylbenzene
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: URT irr; kidney dam (nephropathy); cochlear impair. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
ACGIH	Regulatory reference	ACGIH 2019
OSHA	OSHA PEL (TWA) (mg/m³)	435 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

##### Materials for protective clothing:

Impermeable clothing

##### Hand protection:

Protective gloves

##### Eye protection:

Safety glasses

##### Skin and body protection:

Wear suitable protective clothing

##### Respiratory protection:

Air-fed respiratory protective equipment should be worn when this product is sprayed. Wear respiratory protection.

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### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
	: Colorless
	: characteristic
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 136 °C (ethylbenzene)
Flash point	: > 23 °C (ethylbenzene)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: ≈ 0.9311 (0.925 - 0.94) g/cm <sup>3</sup>
Solubility	: insoluble in water. soluble in most organic solvents.
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 0.5 mm <sup>2</sup> /s (10 s DIN4 @ 20°C)
Viscosity, dynamic	: ≈
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

#### 9.2. Other information

As Packaged Regulatory VOC	: 689 g/l (5.7 lb/gal)
As Packaged Actual VOC	: 689 g/l (5.7 lb/gal)
Exempt Compounds by volume	: 0 vol %
Exempt Compounds by weight	: 0 wt%
Volatiles	: 74.0 wt%
% HAPS	: 69.6 wt%
Percent Solids	: 26.03 wt%
Percent Solids	: 22.03 vol %

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Flammable liquid and vapor.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Harmful if inhaled.

ATE US (vapors)	12.166 mg/l/4h
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#### hexamethylene diisocyanate, oligomers (28182-81-2)

LD50 oral rat	> 2500 mg/kg (OECD Test Guideline 423, rat, female)
LD50 dermal rat	> 2000 mg/kg (OECD Test Guideline 402, rat, male/female)
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	0.39 mg/l/4h

#### hexamethylene-di-isocyanate (822-06-0)

LD50 oral rat	746 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	599 mg/kg (Rabbit, Dermal)
LC50 inhalation rat (mg/l)	(OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Experimental value, Inhalation (vapours))
ATE US (oral)	746 mg/kg body weight
ATE US (dermal)	599 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

#### xylene (1330-20-7)

LD50 oral rat	3523 mg/kg body weight (Equivalent or similar to EU Method B.1: Acute Toxicity (Oral), Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	12126 mg/kg (Non-GLP, read-across from supporting substance, single dermal dose under occlusion followed by observation for 14 days)
LC50 inhalation rat (ppm)	6700 ppm/4h (EU Method B.2 (Acute Toxicity (Inhalation)), 4h, rat, male)
ATE US (oral)	3523 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (gases)	6700 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h

#### ethylbenzene (100-41-4)

LD50 oral rat	3500 mg/kg (Rat, Male/female, Experimental value, Oral)
LD50 dermal rabbit	15432 mg/kg body weight (24 h, Rabbit, Male, Experimental value, Dermal)
LC50 inhalation rat (mg/l)	17.8 mg/l (4 h, Rat, Male, Experimental value, Inhalation (vapours))
ATE US (oral)	3500 mg/kg body weight
ATE US (dermal)	15432 mg/kg body weight
ATE US (vapors)	17.8 mg/l/4h
ATE US (dust, mist)	17.8 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Suspected of causing cancer.

#### xylene (1330-20-7)

IARC group	3 - Not classifiable
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#### ethylbenzene (100-41-4)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity : Not classified  
Specific target organ toxicity – single exposure : May cause respiratory irritation.

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<b>hexamethylene diisocyanate, oligomers (28182-81-2)</b>	
Specific target organ toxicity – single exposure	May cause respiratory irritation.
<b>hexamethylene-di-isocyanate (822-06-0)</b>	
Specific target organ toxicity – single exposure	May cause respiratory irritation.
<b>xylene (1330-20-7)</b>	
Specific target organ toxicity – single exposure	May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : May cause damage to organs through prolonged or repeated exposure.

<b>xylene (1330-20-7)</b>	
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

<b>ethylbenzene (100-41-4)</b>	
Specific target organ toxicity – repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.  
Viscosity, kinematic : 0.5 mm<sup>2</sup>/s (10 s DIN4 @ 20°C)  
Symptoms/effects after inhalation : May cause respiratory irritation. May cause an allergy or asthma symptoms or breathing difficulties if inhaled.  
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.  
Symptoms/effects after eye contact : Eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<b>xylene (1330-20-7)</b>	
LC50 fish 1	2.6 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Static renewal, Fresh water, Read-across, Lethal)
ErC50 (algae)	4.36 mg/l (OECD 201: Alga, Growth Inhibition Test, 73 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
<b>ethylbenzene (100-41-4)</b>	
LC50 fish 1	4.2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Salmo gairdneri, Semi-static system, Fresh water, Experimental value)
EC50 Daphnia 1	2.1 (1.8 - 2.4) mg/l (US EPA, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)

### 12.2. Persistence and degradability

<b>hexamethylene-di-isocyanate (822-06-0)</b>	
Persistence and degradability	Not readily biodegradable in water.
<b>xylene (1330-20-7)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
<b>ethylbenzene (100-41-4)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.44 g O <sub>2</sub> /g substance (20d.)
Chemical oxygen demand (COD)	2.1 g O <sub>2</sub> /g substance
ThOD	3.17 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

<b>hexamethylene-di-isocyanate (822-06-0)</b>	
Log Pow	1.08 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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<b>xylene (1330-20-7)</b>	
BCF fish 1	7.2 - 25.9 (56 day(s), Oncorhynchus mykiss, Flow-through system, Fresh water, Read-across)
Log Pow	3.2 (Read-across, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>ethylbenzene (100-41-4)</b>	
BCF fish 1	1 - 2.4 (Other, 6 week(s), Oncorhynchus kisutch, Flow-through system, Salt water, Experimental value)
Log Pow	3.6 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

<b>hexamethylene-di-isocyanate (822-06-0)</b>	
Ecology - soil	Low potential for adsorption in soil.

<b>xylene (1330-20-7)</b>	
Surface tension	28.01 - 29.76 mN/m (25 °C)
Log Koc	2.73 (log Koc, Equivalent or similar to OECD 121, Read-across)
Ecology - soil	Low potential for adsorption in soil. May be harmful to plant growth, blooming and fruit formation.

<b>ethylbenzene (100-41-4)</b>	
Surface tension	0.071 N/m (23 °C, 0.0582 g/l, EU Method A.5: Surface tension)
Log Koc	2.71 (log Koc, PCKOCWIN v1.66, QSAR)
Ecology - soil	Low potential for adsorption in soil. Toxic to soil organisms.

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	: Flammable vapors may accumulate in the container.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description	: UN1263 Paint, 3, III
UN-No.(DOT)	: UN1263
Proper Shipping Name (DOT)	: Paint
Class (DOT)	: 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT)	: III - Minor Danger
Hazard labels (DOT)	: 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx)	: 173
DOT Packaging Bulk (49 CFR 173.xxx)	: 242

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DOT Special Provisions (49 CFR 172.102)	: 367 - For the purposes of documentation and package marking: a. The proper shipping name "Paint related material" may be used for consignments of packages containing "Paint" and "Paint related material" in the same package; b. The proper shipping name "Paint related material, corrosive, flammable" may be used for consignments of packages containing "Paint, corrosive, flammable" and "Paint related material, corrosive, flammable" in the same package; c. The proper shipping name "Paint related material, flammable, corrosive" may be used for consignments of packages containing "Paint, flammable, corrosive" and "Paint related material, flammable, corrosive" in the same package; and d. The proper shipping name "Printing ink related material" may be used for consignments of packages containing "Printing ink" and "Printing ink related material" in the same package. B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. B131 - When transported by highway, rail, or cargo vessel, waste Paint and Paint related material (UN1263; PG II and PG III), when in plastic or metal inner packagings of not more than 26.5 L (7 gallons), are excepted from the marking requirements in §172.301(a) and (c) and the labeling requirements in §172.400(a), when further packed in the following specification and non-specification bulk outer packagings and under the following conditions:  a. Primary receptacles must conform to the general packaging requirements of subpart B of part 173 of this subchapter and may not leak. If they do leak, they must be overpacked in packagings conforming to the specification requirements of part 178 of this subchapter or in salvage packagings conforming to the requirements in §173.12 of this subchapter.  b. Primary receptacles must be further packed in non-specification bulk outer packagings such as cubic yard boxes, plastic rigid-wall bulk containers, dump trailers, and roll-off containers. Bulk outer packagings must be liquid tight through design or by the use of lining materials.  c. Primary receptacles may also be further packed in specification bulk outer packagings. Authorized specification bulk outer packagings are UN11G fiberboard intermediate bulk containers (IBC) and UN13H4 woven plastic, coated and with liner flexible intermediate bulk containers (FIBCs) meeting the Packing Group II performance level and lined with a plastic liner of at least 6 mil thickness.  d. All inner packagings placed inside bulk outer packagings must be blocked and braced to prevent movement during transportation that could cause the container to open or fall over. Specification IBCs and FIBCs are to be secured to a pallet. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T2 - 1.5 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Emergency Response Guide (ERG) Number	: 128
Other information	: No supplementary information available.

### Transportation of Dangerous Goods

Transport document description	: UN1263 PAINT, 3, III
UN-No. (TDG)	: UN1263

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Proper Shipping Name (Transportation of Dangerous Goods)	: PAINT
TDG Primary Hazard Classes	: 3 - Class 3 - Flammable Liquids
Packing group	: III - Minor Danger
TDG Special Provisions	: 59 - Substances that are listed by name in Schedule 1 must not be transported under this shipping name. Substances transported under this shipping name may contain not more than 20 per cent nitrocellulose if the nitrocellulose contains not more than 12.6 per cent nitrogen (by dry mass), 142 - The following shipping names may be used to meet the requirements of Part 3 (Documentation) and Part 4 (Dangerous Goods Safety Marks) when these dangerous goods are offered for transport in the same means of containment: (a) "PAINT RELATED MATERIAL" may be used for a means of containment containing both paint and paint related material; (b) "PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE" may be used for a means of containment containing both paint, corrosive, flammable, and paint related material, corrosive, flammable; (c) "PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE" may be used for a means of containment containing both paint, flammable, corrosive, and paint related material, flammable, corrosive; and (d) "PRINTING INK RELATED MATERIAL" may be used for a means of containment containing both printing ink and printing ink related material. SOR/2014-306
Explosive Limit and Limited Quantity Index	: 5 L
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 60 L

### Transport by sea

Transport document description (IMDG)	: UN 1263 PAINT, 3, III
UN-No. (IMDG)	: 1263
Proper Shipping Name (IMDG)	: PAINT
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: III - substances presenting low danger
Limited quantities (IMDG)	: 5 L

### Air transport

Transport document description (IATA)	: UN 1263 Paint, 3, III
UN-No. (IATA)	: 1263
Proper Shipping Name (IATA)	: Paint
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: III - Minor Danger

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

hexamethylene-di-isocyanate	CAS-No. 822-06-0	< 5%
xylene, mixture of isomers	CAS-No. 1330-20-7	< 63%
ethylbenzene	CAS-No. 100-41-4	< 23%

#### hexamethylene diisocyanate, oligomers (28182-81-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
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#### hexamethylene-di-isocyanate (822-06-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on EPA Hazardous Air Pollutant (HAPS)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	100 lb
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### xylene (1330-20-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on EPA Hazardous Air Pollutant (HAPS)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 100 lb

### ethylbenzene (100-41-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on EPA Hazardous Air Pollutant (HAPS)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 1000 lb

## 15.2. International regulations

### CANADA

#### hexamethylene diisocyanate, oligomers (28182-81-2)

Listed on the Canadian DSL (Domestic Substances List)

#### hexamethylene-di-isocyanate (822-06-0)

Listed on the Canadian DSL (Domestic Substances List)

#### xylene (1330-20-7)

Listed on the Canadian DSL (Domestic Substances List)

#### ethylbenzene (100-41-4)

Listed on the Canadian DSL (Domestic Substances List)

### EU-Regulations

No additional information available

### National regulations

#### ethylbenzene (100-41-4)

Listed on IARC (International Agency for Research on Cancer)

## 15.3. US State regulations

**⚠ WARNING:** This product can expose you to ethylbenzene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
ethylbenzene(100-41-4)	X				54 µg/day (inhalation); 41 µg/day (oral)	

Component	State or local regulations
hexamethylene-di-isocyanate(822-06-0)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List
xylene(1330-20-7)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
ethylbenzene(100-41-4)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

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SDS US GHS (GHS HazCom2012) - U-POL

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