SECTION 1: Identification

1.1. Identification

Product form: Mixture
Product name: ESD-100-B
Product code: Protect ESD-100-B
Other means of identification: Protect ESD-100-B/1, Protect ESD-100-B/5, Protect ESD-100-B/55, Protect ESD-100-B/Q, Protect ESD-100-B/HG

1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Protective Industrial Polymers
7875 Bliss Parkway
North Ridgeville, Ohio 44039 - USA-Ohio
T 440-327-0015
www.protectpoly.com

1.4. Emergency telephone number

Emergency number: Chemtrec: 800427-9300 (Outside USA) 703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification
Skin corrosion/irritation, Category 1A  H314
Sensitisation — Skin, Category 1  H317

Full text of H statements : see section 16

2.2. Label elements

GHS-US labelling
Hazard pictograms (GHS-US):

![GHS05](image1)  ![GHS07](image2)

Signal word (GHS-US): Danger
Contains: 1,3-bis(aminomethyl)benzene; 1-Piperazine ethanamine
Hazard statements (GHS-US):
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction

Precautionary statements (GHS-US):
P260 - Do not breathe mist, dust
P261 - Avoid breathing fume
P264 - Wash hands thoroughly after handling
P272 - Contaminated work clothing must not be allowed out of the workplace
P280 - Wear protective clothing
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P302+P352 - If on skin: Wash with plenty of soap
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor
P321 - Specific treatment (see a doctor if symptoms do not go away, on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/container to in accordance with local regulations
2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>O,O’-Bis(2-aminopropyl)polypropyleneglycol</td>
<td>(CAS No) 9046-10-0</td>
<td>20 - 30</td>
<td>Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402 Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>Phenol,4-nonyl-branched</td>
<td>(CAS No) 84852-15-3</td>
<td>20 - 30</td>
<td>Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Acute Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>1-Piperazine ethanamine</td>
<td>(CAS No) 140-31-8</td>
<td>10 - 20</td>
<td>Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1A, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>4-tert-butylphenol</td>
<td>(CAS No) 98-54-4</td>
<td>9.1 - 15</td>
<td>Skin Irr. 2, H315 Eye Dam. 1, H318</td>
</tr>
<tr>
<td>(1,6-Hexanediamine,C,C,C-trimethyl-)</td>
<td>(CAS No) 25620-58-0</td>
<td>6.5 - 11.7</td>
<td>Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314</td>
</tr>
<tr>
<td>1,3-bis(aminomethyl)benzene</td>
<td>(CAS No) 1477-55-0</td>
<td>0 - 10</td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314</td>
</tr>
<tr>
<td>Benzenemethanol</td>
<td>(CAS No) 100-51-6</td>
<td>0 - 5</td>
<td>Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319 Aquatic Acute 2, H401</td>
</tr>
<tr>
<td>4-(2,4-dimethylheptan-3-yl)phenol</td>
<td>(CAS No) 25154-52-3</td>
<td>0.26 - 1.3</td>
<td>Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. Wash with plenty of soap and water. If skin irritation or rash occurs: When symptoms occur: rinse immediately with plenty of water. Get medical advice/attention. Specific treatment (see Consult a doctor/medical service on this label). Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation : May cause an allergic skin reaction.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available
SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
Reactivity: Corrosive vapours.

5.3. Advice for firefighters
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe fume. Avoid contact during pregnancy/while nursing. Avoid breathing fume.
Hygiene measures: Wash ... thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Comply with applicable regulations.
Storage conditions: Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use.
Incompatible products: Strong bases. Strong acids.
Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
(1,6-Hexanediamine,C,C,C-trimethyl-) (25620-58-0)
Not applicable
4-(2,4-dimethylheptan-3-yl)phenol (25154-52-3)
Not applicable
Benzenemethanol (100-51-6)
Not applicable
4-tert-butylphenol (98-54-4)
Not applicable
8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or face shield.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: Wear appropriate mask.
Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Appearance: straw colored liquid.
Colour: straw colored liquid
Odour: Ammonical
Odour threshold: No data available
pH: No data available
Melting point: No data available
Freezing point: No data available
Boiling point: > 435 °F
Flash point: > 100 °C
Relative evaporation rate (butylacetate=1): No data available
Flammability (solid, gas): No data available
Explosive limits: No data available
Explosive properties: No data available
Oxidising properties: No data available
Vapour pressure: No data available
Relative density: No data available
Relative vapour density at 20 °C: No data available
Density: 1 kg/l
Solubility: Water: Solubility in water of component(s) of the mixture:
- Benzenemethanol: 4.4 g/100ml (50 °C)
- 4-tert-butylphenol: 0.06 g/100ml (25 °C, insoluble)
- 1,3-bis(aminomethyl)benzene: Complete
- Phenol,4-nonyl-,branched: 5.7 mg/l (25 °C, insoluble)
- 1-Piperazine ethanamine: > 10 g/100ml (20 °C, soluble)
Log Pow: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
SECTION 10: Stability and reactivity

10.1. Reactivity
Corrosive vapours.

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

(1,6-Hexanediamine,C,C,C-trimethyl-) (25620-58-0)
LD50 oral rat < 910 mg/kg (Rat; Literature study)
ATE US (oral) 500.000 mg/kg bodyweight

4-(2,4-dimethylheptan-3-yl)phenol (25154-52-3)
ATE US (oral) 500.000 mg/kg bodyweight

Benzenemethanol (100-51-6)
LD50 oral rat 1620 mg/kg (Rat; Experimental value)
LD50 dermal rabbit > 2000 mg/kg (Rabbit; Inconclusive, insufficient data)
ATE US (oral) 1620.000 mg/kg bodyweight
ATE US (gases) 4500.000 ppmv/4h
ATE US (vapours) 11.000 mg/l/4h
ATE US (dust,mist) 1.500 mg/l/4h

4-tert-butlyphenol (98-54-4)
LD50 oral rat > 2000 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value)
LC50 inhalation rat (mg/l) > 5.6 mg/l/4h (Rat; Experimental value)
ATE US (oral) 3370.000 mg/kg bodyweight
ATE US (dermal) 2621.000 mg/kg bodyweight

1,3-bis(aminomethyl)benzene (1477-55-0)
LD50 oral rat 930 mg/kg (Rat)
LD50 dermal rabbit 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l) 2.4 mg/l/4h (Rat)
ATE US (oral) 930.000 mg/kg bodyweight
ATE US (dermal) 2000.000 mg/kg bodyweight
ATE US (vapours) 2.400 mg/l/4h
ATE US (dust,mist) 2.400 mg/l/4h

Phenol,4-nonyl-,branched (84852-15-3)
LD50 oral rat 1882 mg/kg (Rat; Other; Experimental value; 1412 mg/kg bodyweight; Rat; Experimental value)
ATE US (oral) 1882.000 mg/kg bodyweight
ATE US (dermal) 2040.000 mg/kg bodyweight
ESD-100-B
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

1-Piperazine ethanamine (140-31-8)

<table>
<thead>
<tr>
<th>ATE US (oral)</th>
<th>1470.000 mg/kg bodyweight</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (dermal)</td>
<td>880.000 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes severe skin burns and eye damage.
Serious eye damage/irritation: Not classified
Respiratory or skin sensitisation: May cause an allergic skin reaction.
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential adverse human health effects and symptoms: Based on available data, the classification criteria are not met.
Symptoms/injuries after inhalation: May cause an allergic skin reaction.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: Not classified due to lack of data.

(1,6-Hexanediamine,C,C,C-trimethyl-) (25620-58-0)

<table>
<thead>
<tr>
<th>LC50 fish 1</th>
<th>172 mg/l (LC50; 48 h; Leuciscus idus; Static system)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 1</td>
<td>31.5 mg/l (EC50; 24 h; Daphnia magna)</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
<td>29.5 mg/l (EC50; 72 h; Scenedesmus subspicatus)</td>
</tr>
</tbody>
</table>

Benzenemethanol (100-51-6)

| LC50 fish 1          | 460 mg/l (LC50; EPA OPP 72-1; 96 h; Pimephales promelas; Static system; Fresh water; Experimental value) |

4-tert-butylphenol (98-54-4)

<table>
<thead>
<tr>
<th>EC50 Daphnia 1</th>
<th>3.9 mg/l (EC50; 48 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 2</td>
<td>5.14 mg/l (LC50; 96 h)</td>
</tr>
<tr>
<td>Threshold limit algae 2</td>
<td>11.2 mg/l (EC50; 72 h)</td>
</tr>
</tbody>
</table>

1,3-bis(aminomethyl)benzene (1477-55-0)

<table>
<thead>
<tr>
<th>EC50 Daphnia 1</th>
<th>16 mg/l (EC50; 48 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 2</td>
<td>&gt; 100 mg/l (LC50; 96 h)</td>
</tr>
<tr>
<td>Threshold limit algae 1</td>
<td>12 mg/l (EC50; 72 h)</td>
</tr>
</tbody>
</table>

Phenol,4-nonyl-branched (84852-15-3)

<table>
<thead>
<tr>
<th>EC50 Daphnia 2</th>
<th>0.085 mg/l (EC50; ASTM E729-88; 48 h; Daphnia magna; Semi-static system; Fresh water; Experimental value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold limit algae 2</td>
<td>0.027 mg/l (EC50; EPA OTS 797.1050; 96 h; Skeletonema costatum; Static system; Salt water; Experimental value)</td>
</tr>
</tbody>
</table>

1-Piperazine ethanamine (140-31-8)

<table>
<thead>
<tr>
<th>LC50 fish 1</th>
<th>&gt; 1000 mg/l (LC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum; Fresh water)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50 Daphnia 1</td>
<td>58 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system)</td>
</tr>
<tr>
<td>Threshold limit algae 2</td>
<td>&gt; 1000 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Selenastrum capricornutum; Fresh water)</td>
</tr>
</tbody>
</table>
### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Persistence and degradability</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESD-100-B (1,6-Hexanediamic,H,C,C-trimethyl-) (25620-58-0)</td>
<td>Not established.</td>
<td>Photodegradation in the air.</td>
</tr>
<tr>
<td>Benzenemethanol (100-51-6)</td>
<td>Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.</td>
<td>Photolysis in the air.</td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>1.6 g O₂/g substance</td>
<td></td>
</tr>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>2.4 g O₂/g substance</td>
<td></td>
</tr>
<tr>
<td>ThOD</td>
<td>2.5 g O₂/g substance</td>
<td></td>
</tr>
<tr>
<td>4-tert-butylphenol (98-54-4)</td>
<td>Readily biodegradable in water. Low potential for mobility in soil.</td>
<td></td>
</tr>
<tr>
<td>ThOD</td>
<td>2.77 g O₂/g substance</td>
<td></td>
</tr>
<tr>
<td>1,3-bis(aminomethyl)benzene (1477-55-0)</td>
<td>Not readily biodegradable in water.</td>
<td></td>
</tr>
<tr>
<td>Biochemical oxygen demand (BOD)</td>
<td>0.56 g O₂/g substance</td>
<td></td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESD-100-B (1,6-Hexanediamic,H,C,C-trimethyl-) (25620-58-0)</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
<tr>
<td>Benzenemethanol (100-51-6)</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
<tr>
<td>4-tert-butylphenol (98-54-4)</td>
<td>Low potential for bioaccumulation (BCF &lt; 500).</td>
</tr>
<tr>
<td>1,3-bis(aminomethyl)benzene (1477-55-0)</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
<tr>
<td>Phenol,4-nonyl-branched (84852-15-3)</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
</tbody>
</table>
# ESD-100-B

## Safety Data Sheet

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

## 1. Piperazine ethanamine (140-31-8)

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF fish 1</td>
<td>&lt;= &gt;0.3&lt;=6.3.BCF; OECD 305: Bioconcentration: Flow-Through Fish Test; &gt;4&lt;=6 weeks; Cyprinus carpio; Flow-through system; Fresh water; Read-across</td>
</tr>
<tr>
<td>Log Pow</td>
<td>-1.48 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 20 °C)</td>
</tr>
<tr>
<td>Bioaccumulative potential</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
</tbody>
</table>

## 12.4. Mobility in soil

**Benzenemethanol (100-51-6)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface tension</td>
<td>0.04 N/m (20 °C)</td>
</tr>
</tbody>
</table>

**4-tert-butylphenol (98-54-4)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Koc</td>
<td>log Koc,3.1; QSAR</td>
</tr>
</tbody>
</table>

**Phenol,4-nonyl-branched (84852-15-3)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Koc</td>
<td>log Koc,Other; &gt;= 4.35 - &lt;= 5.69; Experimental value; GLP</td>
</tr>
</tbody>
</table>

**1-Piperazine ethanamine (140-31-8)**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Koc</td>
<td>log Koc,4.57; Read-across; GLP</td>
</tr>
</tbody>
</table>

## 12.5. Other adverse effects

**Effect on the global warming**

: No known ecological damage caused by this product.

**Other information**

: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste disposal recommendations**

: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Remove waste in accordance with local and/or national regulations.

**Ecology - waste materials**

: Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)

**In accordance with DOT**

**Transport document description**

: UN2735 Amines, liquid, corrosive, n.o.s., 8, III

**UN-No.(DOT)**

: UN2735

**Proper Shipping Name (DOT)**

: Amines, liquid, corrosive, n.o.s.

**Class (DOT)**

: 8 - Class 8 - Corrosive material 49 CFR 173.136

**Hazard labels (DOT)**

: 8 - Corrosive

**Packing group (DOT)**

: III - Minor Danger

**DOT Packaging Non Bulk (49 CFR 173.xxx)**

: 203

**DOT Packaging Bulk (49 CFR 173.xxx)**

: 241

**DOT Symbols**

: G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102) : 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).

T7 - 4 178.274(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.

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, 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) : 154

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 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.

DOT Vessel Stowage Other: 52 - Stow “separated from” acids

Other information: No supplementary information available.

TDG
No additional information available

Transport by sea

UN-No. (IMDG) : 2735

Proper Shipping Name (IMDG) : AMINES, LIQUID, CORROSIVE, N.O.S.

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No. (IATA) : 2735

Proper Shipping Name (IATA) : Amines, liquid, corrosive, n.o.s.

Class (IATA) : 8 - Corrosives

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

(1,6-Hexanediocamine, C=C=C-trimethyl-) (25620-58-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

4-(2,4-dimethylheptan-3-yl)phenol (25154-52-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Benzenemethanol (100-51-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

4-tert-butylphenol (98-54-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1,3-bis(aminomethyl)benzene (1477-55-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phenol,4-nonyl-branched (84852-15-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

O,O'-Bis(2-aminopropyl)polypropyleneglycol (9046-10-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1-Piperazine ethanamine (140-31-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
15.2. International regulations

**CANADA**
No additional information available

**EU-Regulations**
No additional information available

**National regulations**
No additional information available

15.3. US State regulations

<table>
<thead>
<tr>
<th>(1,6-Hexanediame, C,C,C-trimethyl-) (25520-58-0)</th>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

**SECTION 16: Other information**

Training advice: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Other information: Disclaimer: This SDS to the best of our knowledge conforms to the requirements of OSHA 20 CFR 1910.1200 and summarizes the health and safety hazard information and general guidance on how to safely handle the material at the date of issue. Each user must review the SDS in the context of how the product will be handled and used in the workplace.

**Full text of H-statements:**

| H227 | Combustible liquid |
| H302 | Harmful if swallowed |
| H311 | Toxic in contact with skin |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H400 | Very toxic to aquatic life |
| H401 | Toxic to aquatic life |
| H402 | Harmful to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| H412 | Harmful to aquatic life with long lasting effects |

**HMIS III Rating**

| Health | 2 Moderate Hazard - Temporary or minor injury may occur |
| Flammability | 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIb) |
| Physical | 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives. |

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.