

**Safety Data Sheet  
acc. to OSHA HCS**

Printing date 04/24/2015

Version 5

Reviewed on 04/24/2015

**\* 1 Identification of the substance/mixture and of the company/undertaking**

- **Product identifier** Covalence S1401-M Part B
  - **Trade name: Covalence S1401-M Part B**
    - **Sector of Use**  
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
    - **Application of the substance / the mixture** Epoxy curing agent
    - **Uses advised against** -
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** Seal For Life Industries - Covalence <sup>TM</sup>
  - **Contact details**

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  - **Information department:** Occupational product safety department of Seal For Life Industries
  - **Emergency telephone number:**  
For worldwide emergency assistance call CHEMTREC (24 hours):  
Within USA/Canada 1-800-424-9300; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

**\* 2 Composition/information on ingredients**

- **Chemical characterization: Mixtures**
  - **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

	Alkyl phenol (Proprietary) ⚠ Acute Tox. 3, H331; ⚠ Resp. Sens. 1, H334; STOT SE 1, H370-H371-H335-H336; STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Sens. 1, H317; Aquatic Acute 2, H401	10-25%
	Alkyl ether amine (Proprietary) ⚠ Resp. Sens. 1, H334; STOT SE 1, H370-H371-H335-H336; STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317	10-25%

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98-54-4	4-tert-butylphenol ⚠ Repr. 2, H361; ⚠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315	10-25%
	Cycloaliphatic amines ⚠ Resp. Sens. 1, H334; STOT SE 1, H370-H371-H335; ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	10-25%
	Aliphatic amine (Proprietary) ⚠ Acute Tox. 2, H330; ⚠ Resp. Sens. 1, H334; STOT SE 1, H370-H371-H335-H336; STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	5.0-10.0%
1761-71-3	4,4'-methylenebis(cyclohexylamine) ⚠ STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Acute 2, H401	5.0-10.0%
111-40-0	2,2'-iminodiethylamine ⚠ Acute Tox. 2, H330; ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; STOT SE 3, H335	2.5-5.0%
84852-15-3	4-nonylphenol, branched ⚠ Repr. 2, H361; ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302	2.5-5.0%
	Alkyl amine (Proprietary) ⚠ Resp. Sens. 1, H334; STOT SE 1, H370-H371-H335-H336; STOT RE 2, H373; ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Sens. 1, H317	2.5-5.0%
100-51-6	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	2.5-5.0%

**3 Hazard(s) identification**

**Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 3      H331      Toxic if inhaled.



GHS08 Health hazard

Resp. Sens. 1      H334      May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 Repr. 2      H361      Suspected of damaging fertility or the unborn child.  
 STOT SE 1      H370-H371      Causes damage to the skin, the respiratory system, the digestive system and the stomach. Route of exposure: Oral, Inhalative, Dermal. May cause damage to the central nervous system and the lung.  
 STOT RE 2      H373      May cause damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Skin Corr. 1A      H314      Causes severe skin burns and eye damage.  
 Eye Dam. 1      H318      Causes serious eye damage.

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GHS09 Environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.  
Skin Sens. 1 H317 May cause an allergic skin reaction.

**Label elements**

**GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**



GHS05



GHS06



GHS08



GHS09

**Signal word** Danger

**Hazard-determining components of labeling:**

Aliphatic amine (Proprietary)  
Alkyl ether amine (Proprietary)  
Alkyl phenol (Proprietary)  
4-tert-butylphenol

**Hazard statements**

H302 Harmful if swallowed.  
H331 Toxic if inhaled.  
H314 Causes severe skin burns and eye damage.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 May cause an allergic skin reaction.  
H361 Suspected of damaging fertility or the unborn child.  
H370-H371 Causes damage to the skin, the respiratory system, the digestive system and the stomach. Route of exposure: Oral, Inhalative, Dermal. May cause damage to the central nervous system and the lung.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P284 Wear respiratory protection.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P273 Avoid release to the environment.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.  
 P310 Immediately call a poison center/doctor.  
 P321 Specific treatment (see on this label).  
 P363 Wash contaminated clothing before reuse.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P391 Collect spillage.  
 P405 Store locked up.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**

**NFPA ratings (scale 0 - 4)**



**HMIS-ratings (scale 0 - 4)**



**4 First-aid measures**

**General information:**

Personal protection for the First Aider.  
 Remove breathing apparatus only after contaminated clothing have been completely removed.  
 Immediately remove any clothing soiled by the product.  
 Take affected persons out of danger area and lay down.  
 In case of irregular breathing or respiratory arrest provide artificial respiration.  
 Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:**

Call a doctor immediately.  
 Use a respiration bag or breathing device.  
 Take affected persons into fresh air and keep quiet.  
 Supply fresh air or oxygen; call for doctor.  
 In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**

Call a doctor immediately.  
 Immediately rinse with water.  
 If skin irritation continues, consult a doctor.

**After eye contact:**

Call a doctor immediately.  
 Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Call a doctor immediately.  
 Do not induce vomiting; immediately call for medical help.  
 Rinse out mouth and then drink plenty of water.

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**\* 5 Fire-fighting measures**

· **Suitable extinguishing agents:**

- Foam
  - Carbon dioxide
  - Fire-extinguishing powder
  - Sand
  - Limestone powder
- Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

- Nitrogen oxides (NO<sub>x</sub>)
- Carbon monoxide (CO)

· **Protective equipment:**

- Wear self-contained respiratory protective device.
- Wear fully protective suit.

· **Additional information**

- Collect contaminated fire fighting water separately. It must not enter the sewage system.
- Disposal of fire debris and contaminated fire fighting water in accordance with official regulations.

**\* 6 Accidental release measures**

· **Personal precautions, protective equipment and emergency procedures**

- Use respiratory protective device against the effects of fumes/dust/aerosol.
- Ensure adequate ventilation
- Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:**

- Do not allow to enter sewers/ surface or ground water.
- Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to penetrate the ground/soil.
- In case of seepage into the ground inform responsible authorities.

· **Methods and material for containment and cleaning up:**

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Use neutralizing agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.

· **Reference to other sections**

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

**\* 7 Handling and storage**

· **Handling:**

· **Precautions for safe handling**

- Ensure appropriate ventilation/exhaust at the workplace.
- Open and handle receptacle with care.
- Prevent formation of aerosols.

· **Information about protection against explosions and fires:** Keep respiratory protective device available.

· **Storage:**

· **Requirements to be met by storerooms and receptacles:**

- Store only in the original receptacle.
- Prevent any seepage into the ground.

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· **Information about storage in one common storage facility:**

- Do not store together with acids.
- Do not store together with alkalis (caustic solutions).
- Store away from oxidizing agents.
- Store away from reducing agents.
- Store away from metals.

· **Further information about storage conditions:**

- Keep receptacle tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- Store receptacle in a well ventilated area.

- **Specific end use(s)** No further relevant information available.

**\* 8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

<b>Aliphatic amine (Proprietary)</b>	
ACGIH TLV	Short-term value: 0.1 mg/m <sup>3</sup> (1994-09-01) Ceiling Limit Value
NIOSH REL	Short-term value: 0.1 mg/m <sup>3</sup> (1994-06-01) Ceiling Limit Value
OSHA PEL	Short-term value: 0.1 mg/m <sup>3</sup> (1989-03-01) Ceiling Limit Value
<b>111-40-0 2,2'-iminodiethylamine</b>	
REL	Long-term value: 4 mg/m <sup>3</sup> , 1 ppm Skin
TLV	Long-term value: 4.2 mg/m <sup>3</sup> , 1 ppm Skin
<b>100-51-6 Benzyl alcohol</b>	
WEEL	Long-term value: 10 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Avoid contact with the eyes and skin.
- Do not eat, drink, smoke or sniff while working.
- Do not inhale gases / fumes / aerosols.

· **Breathing equipment:**

- Use suitable respiratory protective device in case of insufficient ventilation.
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Butyl rubber, BR

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Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Impervious protective clothing

**9 Physical and chemical properties**

· <b>General Information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Fluid
· <b>Color:</b>	Light brown
· <b>Odor:</b>	Ammonia-like
· <b>Odour threshold:</b>	Not determined.
· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	201 °C (394 °F)
· <b>Flash point:</b>	101 °C (214 °F)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Ignition temperature:</b>	300 °C (572 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density at 20 °C (68 °F):</b>	1.03 g/cm <sup>3</sup> (8.595 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
· <b>Water:</b>	Not miscible or difficult to mix.
· <b>Segregation coefficient (n-octanol/water):</b> Not determined.	

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· <b>Viscosity:</b>	
· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	3.1 %
· <b>VOC:</b>	3.1 %
	32.4 g/l / 0.27 lb/gl
· <b>Other information</b>	No further relevant information available.

**\* 10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:**  
Reacts with strong acids.  
Reacts with oxidizing agents.
- **Hazardous decomposition products:**  
Poisonous gases/vapors  
Flammable gases/vapors  
Nitrogen oxides  
Ammonia  
Aldehyde

**\* 11 Toxicological information**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**ATE (Acute Toxicity Estimates)**

Oral	LD50	1191 mg/kg
Dermal	LD50	3119 mg/kg
Inhalative	LC50/4h	3.18 mg/l

**Alkyl phenol (Proprietary)**

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	2288 mg/kg (rabbit)
Inhalative	LC50/4h	5 mg/l (rat)

**Alkyl ether amine (Proprietary)**

Oral	LD50	910 mg/kg (rat)
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**98-54-4 4-tert-butylphenol**

Oral	LD50	2951 mg/kg (rat)
Dermal	LD50	2288 mg/kg (rabbit)

**Cycloaliphatic amines**

Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	1100 mg/kg (ATE)
Inhalative	LC50/4h	11 mg/l (ATE)

**Aliphatic amine (Proprietary)**

Oral	LD50	930 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

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Inhalative	LC50	3.89 mg/kg (rat) (1h)
	LC50/4h	0.8 mg/l (rat) (female)
<b>1761-71-3 4,4'-methylenebis(cyclohexylamine)</b>		
Oral	LD50	380 mg/kg (rat)
Dermal	LD50	>1000 mg/kg (rabbit)
<b>111-40-0 2,2'-iminodiethylamine</b>		
Oral	LD50	1553 mg/kg (rat)
Dermal	LD50	1045 mg/kg (rabbit)
Inhalative	LC50/4h	0.3 mg/l (rat) (OECD Guideline 403)
<b>84852-15-3 4-nonylphenol, branched</b>		
Oral	LD50	1412 mg/kg (rat) (other guideline)
<b>Alkyl amine (Proprietary)</b>		
Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	1100 mg/kg (ATE)
Inhalative	LC50/4h	11 mg/l (ATE)
<b>100-51-6 Benzyl alcohol</b>		
Oral	LD50	1230 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/4h	4178 mg/l (rat)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.

- **Sensitization:**

- Sensitization possible through inhalation.
- Sensitization possible through skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful  
 Corrosive  
 Irritant  
 Very toxic

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**\* 12 Ecological information**

- **Aquatic toxicity:**

- **Alkyl phenol (Proprietary)**

LC50/96h 5 mg/l (Fish - Pimephales promelas)

- **98-54-4 4-tert-butylphenol**

EC50 2 mg/l (Daphnia magna) (OECD 211 - 21 days)

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EC50/48h	4.8 mg/l (Daphnia magna) (OECD 202)
ErC50/72h - Inhibition of average growth rate	14 mg/l (Algae - Pseudokirchneriella subcapitata) (OECD 201)
LC50/96h	> 1 mg/l (Fish - Oncorhynchus mykiss) (OECD 203)
NOEC/21days	0.73 mg/l (Daphnia magna) (OECD 202)
NOEC/72h	0.32 mg/l (Algae - Pseudokirchneriella subcapitata) (OECD 201)
<b>1761-71-3 4,4'-methylenebis(cyclohexylamine)</b>	
EC50/48h	9.24 mg/l (Daphnia magna)
EC50/72h	140 mg/l (Algae)
LC50/96h	46 mg/l (Fish - Leuciscus idus)
<b>111-40-0 2,2'-iminodiethylamine</b>	
EC50/48h	16 mg/l (Daphnia magna) (DIN 38412, part 11)
LC50/96h	430 mg/l (fish)
<b>84852-15-3 4-nonylphenol, branched</b>	
EC50/48h	0.14 mg/l (Daphnia magna) (EU Method C.2)
EC50/72h	1.3 mg/l (Algae - Desmodesmus subspicatus) (other guideline)
LC50/96h	0.23 mg/l (Fish - Oncorhynchus mykiss) (ASTM 1991 E729-88a)
	0.128 mg/l (Fish - Pimephales promelas) (ASTM 1991 E729-88a)
NOEC/21days	0.024 mg/l (Daphnia magna) (OECD 202 (reproduction))
NOEC/91d	0.006 mg/l (Fish - Oncorhynchus mykiss) (Study report acc. ASTM guideline)
<b>100-51-6 Benzyl alcohol</b>	
EC50/24h	55 mg/l (Daphnia magna)
IC50/72h	700 mg/l (Algae)
LC50/96h	10 mg/l (Fish - Lepomis macrochirus)
	460 mg/l (Fish - Pimephales promelas)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
- **Ecotoxicological effects:**
  - **Remark:** Toxic for fish
- **Additional ecological information:**
  - **General notes:**
    - Must not reach bodies of water or drainage ditch undiluted or unneutralized.
    - Also poisonous for fish and plankton in water bodies.
    - Toxic for aquatic organisms
    - Water hazard class 3 (Self-assessment): extremely hazardous for water
    - Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    - Danger to drinking water if even extremely small quantities leak into the ground.

**\* 13 Disposal considerations**

- **Waste treatment methods**
  - **Recommendation:**
    - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations.

**\* 14 Transport information**

<ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>DOT, ADR, IMDG, IATA</b></li> </ul>	<p>UN2735</p>
<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>DOT</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul>	<p>Polyamines, liquid, corrosive, n.o.s. (Diethylenetriamine, Alkyl amine (Proprietary)) 2735 Polyamines, liquid, corrosive, n.o.s. (Diethylenetriamine, Alkyl amine (Proprietary)), ENVIRONMENTALLY HAZARDOUS POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE, Alkyl amine (Proprietary)), 4-nonylphenol, branched), MARINE POLLUTANT POLYAMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE, Alkyl amine (Proprietary))</p>
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>DOT</b></li> </ul>	<div style="display: flex; align-items: center;">   </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> <p>8 Corrosive substances 8</p>
<ul style="list-style-type: none"> <li>· <b>ADR, IMDG</b></li> </ul>	<div style="display: flex; align-items: center;">   </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> <p>8 Corrosive substances 8</p>
<ul style="list-style-type: none"> <li>· <b>IATA</b></li> </ul>	<div style="display: flex; align-items: center;">  </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul> <p>8 Corrosive substances 8</p>
<ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>DOT, ADR, IMDG, IATA</b></li> </ul>	<p>II</p>
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> <li>· <b>Marine pollutant:</b></li> <li>· <b>Special marking (ADR):</b></li> </ul>	<p>Yes Symbol (fish and tree) Symbol (fish and tree)</p>

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<ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>Danger code (Kemler):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Segregation groups</b></li> </ul>	<p>Warning: Corrosive substances</p> <p>80</p> <p>F-A,S-B</p> <p>Alkalis</p>
<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b></li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> <li>· <b>DOT</b></li> <li>· <b>Quantity limitations</b></li> <li>· <b>Remarks:</b></li> </ul>	<p>On passenger aircraft/rail: 1 L</p> <p>On cargo aircraft only: 30 L</p> <p>Special marking with the symbol (fish and tree).</p>
<ul style="list-style-type: none"> <li>· <b>ADR</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>Code: E2</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p>1L</p> <p>Code: E2</p> <p>Maximum net quantity per inner packaging: 30 ml</p> <p>Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p>UN2735, Polyamines, liquid, corrosive, n.o.s. (Diethylenetriamine, Alkyl amine (Proprietary)), ENVIRONMENTALLY HAZARDOUS, 8, II</p>

**\* 15 Regulatory information**

· **Sara**

<ul style="list-style-type: none"> <li>· <b>Section 355 (extremely hazardous substances):</b></li> </ul> <p>None of the ingredients is listed.</p>
<ul style="list-style-type: none"> <li>· <b>Section 313 (Specific toxic chemical listings):</b></li> </ul> <p>None of the ingredients is listed.</p>
<ul style="list-style-type: none"> <li>· <b>TSCA (Toxic Substances Control Act):</b></li> </ul> <p>All ingredients of this product are included, or are exempted from inclusion in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory</p>
<ul style="list-style-type: none"> <li>· <b>Proposition 65</b></li> <li>· <b>Chemicals known to cause cancer:</b></li> </ul> <p>None of the ingredients is listed.</p>
<ul style="list-style-type: none"> <li>· <b>Chemicals known to cause reproductive toxicity for females:</b></li> </ul> <p>None of the ingredients is listed.</p>
<ul style="list-style-type: none"> <li>· <b>Chemicals known to cause reproductive toxicity for males:</b></li> </ul> <p>None of the ingredients is listed.</p>
<ul style="list-style-type: none"> <li>· <b>Chemicals known to cause developmental toxicity:</b></li> </ul> <p>None of the ingredients is listed.</p>

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· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS05 GHS06 GHS08 GHS09

· **Signal word** Danger

· **Hazard-determining components of labeling:**

Aliphatic amine (Proprietary)  
Alkyl ether amine (Proprietary)  
Alkyl phenol (Proprietary)  
4-tert-butylphenol

· **Hazard statements**

H302 Harmful if swallowed.  
H331 Toxic if inhaled.  
H314 Causes severe skin burns and eye damage.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 May cause an allergic skin reaction.  
H361 Suspected of damaging fertility or the unborn child.  
H370-H371 Causes damage to the skin, the respiratory system, the digestive system and the stomach. Route of exposure: Oral, Inhalative, Dermal. May cause damage to the central nervous system and the lung.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P284 Wear respiratory protection.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P273 Avoid release to the environment.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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.  
P309+P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.  
P310 Immediately call a poison center/doctor.  
P321 Specific treatment (see on this label).  
P363 Wash contaminated clothing before reuse.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

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P391	Collect spillage.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Occupational product safety department of Seal For Life Industries

· **Contact:**

Seal For Life Industries

Gasselterstraat 20, 9503JB Stadskanaal, the Netherlands

Tel: +31 599 696 170; Fax: +31 599 696 177; Email: info@sealforlife.com

· **Date of preparation / last revision** 04/24/2015 / 4

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Acute Tox. 2: Acute toxicity, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - AcuteHazard, Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

· **\* Data compared to the previous version altered.**