

Safety Data Sheet
acc. to OSHA HCS

Printing date 01/04/2018

Version 12

Reviewed on 01/04/2018

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

Product identifier Powercrete R-95 Part B

Trade name: Powercrete R-95 Part B
Application of the substance / the mixture Coating
Uses advised against -

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Seal For Life Industries - Powercrete™

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, CCN22955; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

*** 2 Hazard(s) identification**

Classification of the substance or mixture



GHS08 Health hazard

STOT RE 2 H373 May cause damage to the kidneys, the liver and the spleen through prolonged or repeated exposure. Route of exposure: Oral.



GHS05 Corrosion

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



GHS07

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Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Aquatic Acute 3 H402 Harmful to aquatic life.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Label elements

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

Hazard pictograms



Signal word Danger

Hazard-determining components of labeling:

Benzyl alcohol
3,6,9-triazaundecamethylenediamine
Cycloaliphatic amines
4,4'-methylenebis(cyclohexylamine)
trimethylhexane-1,6-diamine
N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine

Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to the kidneys, the liver and the spleen through prolonged or repeated exposure.
Route of exposure: Oral.
H402 Harmful to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
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 poison center/doctor.
P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment (see on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Results of PBT and vPvB assessment

PBT: Not available.

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vPvB: Not available.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:		
100-51-6	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	10-25%
2579-20-6	1,3-Cyclohexanedimethanamine ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Aquatic Chronic 3, H412	10-25%
112-57-2	3,6,9-triazaundecamethylenediamine ⚠ Skin Corr. 1B, H314; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317	10-25%
	Cycloaliphatic amines ⚠ STOT RE 2, H373; ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317	10-25%
25620-58-0	trimethylhexane-1,6-diamine ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	10-25%
69-72-7	Salicylic acid ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	5-10%
10563-29-8	N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine ⚠ Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317	5-10%
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	5-10%
9046-10-0	(O,O'-Bis(2-aminopropyl)polypropyleneglycol) ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Aquatic Chronic 2, H411; Aquatic Acute 3, H402	2.5-5%
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2A, H319	2.5-5%

4 First-aid measures

Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

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Indication of any immediate medical attention and special treatment needed

No further relevant information available.

*** 5 Fire-fighting measures**

Extinguishing media

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture

During heating or in case of fire poisonous gases are produced.

Advice for firefighters

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.

*** 6 Accidental release measures**

Personal precautions, protective equipment and emergency procedures

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

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.

Protective Action Criteria for Chemicals

PAC-1:		
100-51-6	Benzyl alcohol	30 ppm
112-57-2	3,6,9-triazaundecamethylenediamine	15 mg/m ³
67762-90-7	Siloxanes and silicones, di-Me, reaction products with silica	120 mg/m ³
9046-10-0	(O,O'-Bis(2-aminopropyl)polypropyleneglycol)	4.8 mg/m ³
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	6.5 mg/m ³
PAC-2:		
100-51-6	Benzyl alcohol	52 ppm
112-57-2	3,6,9-triazaundecamethylenediamine	130 mg/m ³
67762-90-7	Siloxanes and silicones, di-Me, reaction products with silica	1,300 mg/m ³
9046-10-0	(O,O'-Bis(2-aminopropyl)polypropyleneglycol)	53 mg/m ³
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	72 mg/m ³
PAC-3:		
100-51-6	Benzyl alcohol	740 ppm
112-57-2	3,6,9-triazaundecamethylenediamine	790 mg/m ³
67762-90-7	Siloxanes and silicones, di-Me, reaction products with silica	7,900 mg/m ³
9046-10-0	(O,O'-Bis(2-aminopropyl)polypropyleneglycol)	320 mg/m ³

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90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	430 mg/m ³
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*** 7 Handling and storage**

Handling:

Precautions for safe handling Ensure appropriate ventilation/exhaust at the workplace.

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

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Store under lock and key and out of the reach of children.

Keep receptacle tightly sealed.

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.

Control parameters

Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

100-51-6 Benzyl alcohol		
WEEL	Long-term value: 10 ppm	
112-57-2 3,6,9-triazaundecamethylenediamine		
WEEL	Long-term value: 5 mg/m ³ Skin; DSEN	
DNELs		
100-51-6 Benzyl alcohol		
Oral	DNEL - Systemic effect, acute/short term exposure	20 mg/kg bw/day (General population)
	DNEL - Systemic effect, long term exposure	4 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, acute/short term exposure	20 mg/kg bw/day (General population)
	DNEL - Systemic effect, long term exposure	4 mg/kg bw/day (General population) 8 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, acute/short term exposure	27 mg/m ³ (General population) 110 mg/m ³ (Workers)
	DNEL - Systemic effect, long term exposure	5.4 mg/m ³ (General population) 22 mg/m ³ (Workers)
2579-20-6 1,3-Cyclohexanedimethanamine		
Inhalative	DNEL - Local effect, long term exposure	0.00947 mg/m ³ (Workers)
69-72-7 Salicylic acid		
Oral	DNEL - Systemic effect, acute/short term exposure	4 mg/kg bw/day (General population)
	DNEL - Systemic effect, long term exposure	1 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, long term exposure	1 mg/kg bw/day (General population) 2.3 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, long term exposure	4 mg/m ³ (General population) 5 mg/m ³ (Workers)

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	DNEL - Local effect, long term exposure	5 mg/m3 (Workers)
10563-29-8 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine		
Oral	DNEL - Systemic effect, long term exposure	0.2 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, long term exposure	0.67 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, acute/short term exposure	7.5 mg/m3 (Workers)
	DNEL - Local effect, acute/short term exposure	7.5 mg/m3 (Workers)
	DNEL - Systemic effect, long term exposure	0.65 mg/m3 (General population)
		3.7 mg/m3 (Workers)
	DNEL - Local effect, long term exposure	0.65 mg/m3 (General population)
		3.7 mg/m3 (Workers)
1761-71-3 4,4'-methylenebis(cyclohexylamine)		
Oral	DNEL - Systemic effect, long term exposure	0.06 mg/kg bw/day (General population)
Dermal	DNEL - Systemic effect, long term exposure	0.06 mg/kg bw/day (General population)
Inhalative		0.1 mg/kg bw/day (Workers)
	DNEL - Systemic effect, long term exposure	0.21 mg/m3 (General population)
		1 mg/m3 (Workers)
9046-10-0 (O,O'-Bis(2-aminopropyl)polypropyleneglycol)		
Dermal	DNEL - Systemic effect, long term exposure	2.5 mg/kg bw/day (Workers)
Inhalative	DNEL - Systemic effect, long term exposure	1.36 mg/m3 (Workers)
PNECs		
100-51-6 Benzyl alcohol		
	PNEC - Fresh water	1 mg/l (Aquatic organisms)
	PNEC - Marine water	0.1 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	2.3 mg/l (Aquatic organisms)
	PNEC - STP	39 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	5.27 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	0.527 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	0.456 mg/kg soil dw (Terrestrial organisms)
2579-20-6 1,3-Cyclohexanedimethanamine		
	PNEC - Fresh water	0.033 mg/l (Aquatic organisms)
	PNEC - Marine water	0.003 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	0 mg/l (Aquatic organisms)
	PNEC - STP	10 mg/l (Aquatic organisms)
69-72-7 Salicylic acid		
	PNEC - Fresh water	0.2 mg/l (Aquatic organisms)
	PNEC - Marine water	0.02 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	1 mg/l (Aquatic organisms)
	PNEC - STP	162 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	1.42 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	0.142 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	0.166 mg/kg soil dw (Terrestrial organisms)
10563-29-8 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine		
	PNEC - Fresh water	0.0092 mg/l (Aquatic organisms)
	PNEC - Marine water	0.00092 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	0.092 mg/l (Aquatic organisms)
	PNEC - STP	18.1 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	0.034 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	0.00336 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	0.00132 mg/kg soil dw (Aquatic organisms)

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1761-71-3 4,4'-methylenebis(cyclohexylamine)		
	PNEC - Fresh water	0.08 mg/l (Aquatic organisms)
	PNEC - Marine water	0.008 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	0.08 mg/l (Aquatic organisms)
	PNEC - STP	3.2 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	137 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	13.7 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	27.2 mg/kg soil dw (Terrestrial organisms)
9046-10-0 (O,O'-Bis(2-aminopropyl)polypropyleneglycol)		
Oral	PNEC - Oral	6.93 mg/kg food (Predators)
	PNEC - Fresh water	0.015 mg/l (Aquatic organisms)
	PNEC - Marine water	0.014 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	0.15 mg/l (Aquatic organisms)
	PNEC - STP	7.5 mg/l (Aquatic organisms)
	PNEC - Sediment, fresh water	0.132 mg/kg sedim dw (Aquatic organisms)
	PNEC - Sediment, marine water	0.125 mg/kg sedim dw (Aquatic organisms)
	PNEC - Soil	0.018 mg/kg soil dw (Terrestrial organisms)
90-72-2 2,4,6-tris(dimethylaminomethyl)phenol		
	PNEC - Fresh water	0.084 mg/l (Aquatic organisms)
	PNEC - Marine water	0.008 mg/l (Aquatic organisms)
	PNEC - Fresh water, intermittent releases	0.84 mg/l (Aquatic organisms)
	PNEC - STP	0.2 mg/l (Aquatic organisms)

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

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

- Do not inhale gases / fumes / aerosols.
- Do not inhale dust / smoke / mist.
- Avoid contact with the eyes and skin.
- Do not eat or drink while working.
- 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.

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 selfcontained respiratory protective device.

Protection of hands:



Protective gloves

Material of gloves

Butyl rubber, BR

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.

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.

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Eye protection:



Tightly sealed goggles

Body protection: Impervious protective clothing

9 Physical and chemical properties

Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Fluid
Color:	Amber colored
Odor:	Amine-like
Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	>200 °C (>392 °F)
Flash point:	101 °C (213.8 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	>160 °C (>320 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	1.3 Vol %
Upper:	13 Vol %
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	1.03 g/cm ³ (8.6 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Segregation coefficient (n-octanol/water): Not determined.	
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	17.5 %
VOC:	17.52 % 180.5 g/l / 1.51 lb/gl
Solids content:	0.0 %

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Other information

No further relevant information available.

*** 10 Stability and reactivity**

Reactivity No further relevant information available.

Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No further relevant information available.

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

*** 11 Toxicological information**

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Oral	LD50	873 mg/kg
Dermal	LD50	>2,051-2,512 mg/kg
Inhalative	LC50/4h	>23.8 mg/l (rat)

100-51-6 Benzyl alcohol

Oral	LD50	1,230 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalative	LC50/4h	>4.178 mg/l (rat) (OECD 403)

2579-20-6 1,3-Cyclohexanedimethanamine

Oral	LD50	500 mg/kg (ATE)
Dermal	LD50	1,100 mg/kg (ATE)

112-57-2 3,6,9-triazaundecamethylenediamine

Oral	LD50	3,250 mg/kg (rat)
Dermal	LD50	660-1,260 mg/kg (rabbit)

Cycloaliphatic amines

Oral	LD50	500 mg/kg (ATE)
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25620-58-0 trimethylhexane-1,6-diamine

Oral	LD50	900 mg/kg (rat)
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69-72-7 Salicylic acid

Oral	LD50	891 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 402)

10563-29-8 N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine

Oral	LD50	1,669 mg/kg (rat)
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1761-71-3 4,4'-methylenebis(cyclohexylamine)

Oral	LD50	380 mg/kg (rat) (EPA OPP 81-1)
Dermal	LD50	2,110 mg/kg (rabbit) (EPA OPP 81-2)

9046-10-0 (O,O'-Bis(2-aminopropyl)polypropyleneglycol)

Oral	LD50	2,855 mg/kg (rat)
Dermal	LD50	2,980 mg/kg (rabbit)

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90-72-2 2,4,6-tris(dimethylaminomethyl)phenol		
Oral	LD50	2,169 mg/kg (rat)

Primary irritant effect:

on the skin: Strong caustic effect on skin and mucous membranes.

on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

Sensitization: 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

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.	
Specific Target Organ Toxicity (STOT) - Repeated Exposure (RE)	
Cycloaliphatic amines	
Oral	NOAEL 15 mg/kg bw/day (rat) (tested for systemic effects during 28 days)

***12 Ecological information**

Toxicity

Aquatic toxicity:	
100-51-6 Benzyl alcohol	
LC50/96h	10 mg/l (Fish - Lepomis macrochirus) 460 mg/l (Fish - Pimephales promelas)
EC50/24h	55 mg/l (Daphnia magna)
IC50/72h	700 mg/l (Algae)
2579-20-6 1,3-Cyclohexanedimethanamine	
LC50	130 mg/l (fish)
EC50/48h	33.1 mg/l (Daphnia magna)
EC50/72h	56.7 mg/l (Algae)
112-57-2 3,6,9-triazaundecamethylenediamine	
LC50/96h	310->1,000 mg/l (Fish - Pimephales promelas) 420 mg/l (Fish - Oryzias latipes)
EC50/48h	14.6-24.1 mg/l (Daphnia magna)
EC50/72h	2.1-6.8 mg/l (Algae)
25620-58-0 trimethylhexane-1,6-diamine	
LC50/48h	172 mg/l (Fish - Leuciscus idus)
EC50/24h	31.5 mg/l (Daphnia magna)
EC50/72h	29.5 mg/l (Algae - Desmodesmus subspicatus)

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69-72-7 Salicylic acid	
LC50/96h	>1,000 mg/l (Fish - Pimephales promelas) (OECD 203)
EC50/48h	870 mg/l (Daphnia magna) (OECD 202)
NOEC/21days	10 mg/l (Daphnia magna) (OECD 202)
1761-71-3 4,4'-methylenebis(cyclohexylamine)	
LC50/96h	68 mg/l (Fish - Leuciscus idus) (DIN 38 412, part L15)
EC50/48h	7.07 mg/l (Daphnia magna) (OECD 202)
EC50/72h	140 mg/l (Algae - Scenedesmus subspicatus) (DIN 38412, Part 9)
9046-10-0 (O,O'-Bis(2-aminopropyl)polypropyleneglycol)	
EC50/96h	>15 mg/l (Fish - Oncorhynchus mykiss) (OECD 203)
EC50/48h (static)	418.34 mg/l (Cocepods - Acartia tonsa) (ISO TC147/SC5/WG2)
90-72-2 2,4,6-tris(dimethylaminomethyl)phenol	
LC50/96h	>180 mg/l (Fish - Salmo Gairdneri) (WoE - study report) 175 mg/l (Fish - Cyprinus carpio) (WoE study report) 718 mg/l (Aq. Invertebr. - Palaemonetes vulgari) (WoE study report)
EC50/72h	84 mg/l (Algae - Desmodesmus subspicatus) (OECD 201)

Persistence and degradability No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Harmful to fish

Additional ecological information:

General notes:

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Harmful to 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.

Results of PBT and vPvB assessment

PBT: Not available.

vPvB: Not available.

Other adverse effects No further relevant information available.

*** 13 Disposal considerations**

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

*** 14 Transport information**

UN-Number DOT, ADR, IMDG, IATA	UN2735
UN proper shipping name DOT	Amines, liquid, corrosive, n.o.s. (Tetraethylenepentamine, Cycloaliphatic amines)

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ADR	2735 Amines, liquid, corrosive, n.o.s. (Tetraethylenepentamine, Cycloaliphatic amines)
IMDG, IATA	AMINES, LIQUID, CORROSIVE, N.O.S. (TETRAETHYLENEPENTAMINE, Cycloaliphatic amines)
Transport hazard class(es)	
DOT	
	
Class	8 Corrosive substances
Label	8
<hr/>	
ADR, IMDG, IATA	
	
Class	8 Corrosive substances
Label	8
Packing group	
DOT, ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user	Warning: Corrosive substances
Danger code (Kemler):	80
EMS Number:	F-A,S-B
Segregation groups	Alkalis
Stowage Category	A
Segregation Code	SG35 Stow "separated from" acids.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
<hr/>	
ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<hr/>	
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (TETRAETHYLENEPENTAMINE, CYCLOALIPHATIC AMINES), 8, III

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*** 15 Regulatory information**

Safety, health and environmental regulations/legislation specific for the substance or mixture
Sara

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients of this product are included, or are exempted from inclusion in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory

TSCA new (21st Century Act) (Substances not listed)

	Cycloaliphatic amines
10563-29-8	N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

New Jersey Right-to-Know List:

112-57-2	3,6,9-triazaundecamethylenediamine
25620-58-0	trimethylhexane-1,6-diamine

New Jersey Special Hazardous Substance List:

112-57-2	3,6,9-triazaundecamethylenediamine	CO
25620-58-0	trimethylhexane-1,6-diamine	CO

Pennsylvania Right-to-Know List:

100-51-6	Benzyl alcohol
112-57-2	3,6,9-triazaundecamethylenediamine

Pennsylvania Special Hazardous Substance List:

None of the ingredients is listed.

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).
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Hazard pictograms



GHS05 GHS07 GHS08

Signal word Danger

Hazard-determining components of labeling:

Benzyl alcohol
3,6,9-triazaundecamethylenediamine
Cycloaliphatic amines
4,4'-methylenebis(cyclohexylamine)
trimethylhexane-1,6-diamine
N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine

Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to the kidneys, the liver and the spleen through prolonged or repeated exposure.
Route of exposure: Oral.

H402 Harmful to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
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 poison center/doctor.
P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment (see on this label).
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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:

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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)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Skin Sens. 1: Skin sensitisation – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2
Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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