

Safety Data Sheet
acc. to OSHA HCS

Printing date 08/20/2014

Version 4

Reviewed on 08/20/2014

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

Product identifier Powercrete J Part A

Trade name: Powercrete J Part A

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

Sector of Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Application of the substance / the mixture Epoxy resin

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Seal For Life Industries - Powercrete TM

Contact details

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mexico@sealforlife.com

Information department: Product safety department of manufacturer / supplier

Emergency telephone number:

For emergency assistance call CHEMTREC (24 hours):

Within USA/Canada 1-800-424-9300; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

*** 2 Hazard(s) identification**

Classification of the substance or mixture



GHS08 Health hazard

Carc. 1A H350 May cause cancer. Route of exposure: Inhalative.

STOT RE 2 H373 May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.



GHS09 Environment

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

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GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
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



GHS07

GHS08

GHS09

Signal word Danger

Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)
Quartz (SiO₂)
Polypropylene glycol, (chloromethyl) oxirane polymer
Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]

Hazard statements

Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause cancer. Route of exposure: Inhalative.
May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.
Toxic to aquatic life with long lasting effects.

Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.
Avoid release to the environment.
Wash thoroughly after handling.
Contaminated work clothing should not be allowed out of the workplace.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Specific treatment (see on this label).
Take off contaminated clothing and wash before reuse.
Wash contaminated clothing before reuse.
IF exposed or concerned: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Get medical advice/attention if you feel unwell.
IF ON SKIN: Wash with plenty of water.
Collect spillage.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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Classification system:

NFPA ratings (scale 0 - 4)



HMIS-ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

PBT: Not available.

vPvB: Not available.

*** 3 Composition/information on ingredients**

Chemical characterization: Mixtures

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

Dangerous components:

25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2, H319; ⚠ Skin Sens. 1, H317	25-50%
9072-62-2	Polypropylene glycol, (chloromethyl) oxirane polymer ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2A, H319; ⚠ Skin Sens. 1, H317	2.5-5.0%
67924-34-9	Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol] ⚠ Skin Irrit. 2, H315; ⚠ Eye Irrit. 2A, H319; ⚠ Skin Sens. 1, H317; ⚠ Aquatic Chronic 4, H413	2.5-5.0%
14808-60-7	Quartz (SiO ₂) ⚠ Carc. 1A, H350; ⚠ STOT RE 1, H372-H373; ⚠ Acute Tox. 4, H302; ⚠ Acute Tox. 4, H332	1.0-2.5%

4 First-aid measures

Description of first aid measures

After inhalation:

Take affected persons into fresh air and keep quiet.

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. If symptoms persist, consult a doctor.

After swallowing:

Do not induce vomiting; immediately call for medical help.

Rinse out mouth and then drink plenty of water.

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

Water haze
Foam
Fire-extinguishing powder
Carbon dioxide

Special hazards arising from the substance or mixture

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

In case of fire, the following can be released:

Hydrogen chloride (HCl)
Carbon monoxide (CO)
Carbon dioxide (CO₂)

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 Not required.

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.
Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
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

Precautions for safe handling

Avoid ignition sources
Keep away from heat and direct sunlight.
Ensure appropriate ventilation/exhaust at the workplace.
Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.
Protect from heat.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Provide floor trough without outlet.

Information about storage in one common storage facility:

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

Further information about storage conditions:

Store in dry conditions.

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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:	
14808-60-7 Quartz (SiO₂)	
PEL	see Quartz listing
REL	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV	Long-term value: 0.025* mg/m ³ *as respirable fraction

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

Exposure controls

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.
Avoid contact with the eyes and skin.

Breathing equipment:

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

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

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: Protective work clothing

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9 Physical and chemical properties

Information on basic physical and chemical properties	
General Information	
Appearance:	
Form:	Viscous
Color:	Brown
Odor:	Mild
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	201 °C (394 °F)
Flash point:	> 93 °C (> 199 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	1.78 g/cm ³ (14.854 lbs/gal)
Relative density	Not determined.
Vapour 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:	0.0 %
Other information	The material polymerizes to 100% solids, after mixing and reaction with the corresponding "Part B" of the product.

10 Stability and reactivity

Reactivity

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:

Reacts with oxidizing agents.

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Reacts with strong acids.
Strong alkalines

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:

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>4000 mg/kg (rat) >22000 mg/kg (rabbit)

9072-62-2 Polypropylene glycol, (chloromethyl) oxirane polymer

Oral	LD50	>2000 mg/kg (rat)
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14808-60-7 Quartz (SiO₂)

Oral	LD50	1300 mg/kg (rat)
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Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

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

Carcinogenic categories

IARC (International Agency for Research on Cancer)

14808-60-7	Quartz (SiO ₂)	1
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NTP (National Toxicology Program)

14808-60-7	Quartz (SiO ₂)	K
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OSHA-Ca (Occupational Safety & Health Administration)

67924-34-9	Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene) bis[phenol]
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*** 12 Ecological information**

Toxicity

Aquatic toxicity:

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

EC50/24h	3.6 mg/l (Daphnia magna)
EC50/48h	1.4-1.7 mg/l (Daphnia magna)
LC50/96h	1.5 mg/l (Fish - Oncorhynchus mykiss) 2.4 mg/l (Fish - Brachydanio rerio)

Persistence and degradability No further relevant information available.

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Toxic for fish

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Additional ecological information:

General notes:

Toxic for aquatic organisms
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even 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:

Dispose safely in accordance with local and national legislations
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	UN3082
UN proper shipping name DOT	Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
ADR	3082 Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))
Transport hazard class(es) DOT, ADR, IMDG, IATA	
 	
Class Label	9 Miscellaneous dangerous substances and articles 9
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards:	Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

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Marine pollutant:	Yes Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special marking (IATA):	Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substances and articles
Danger code (Kemler):	90
EMS Number:	F-A,S-F
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: No limit On cargo aircraft only: No limit
Remarks:	Special marking with the symbol (fish and tree).

ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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":	UN3082, Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)), 9, III

***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):	
1313-13-9	manganese dioxide
1344-28-1	aluminium oxide
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	
Proposition 65	
Chemicals known to cause cancer:	
14808-60-7	Quartz (SiO ₂)
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.	

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Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

1313-13-9	manganese dioxide	D
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TLV (Threshold Limit Value established by ACGIH)

14808-60-7	Quartz (SiO ₂)	A2
1344-28-1	aluminium oxide	A4

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

14808-60-7	Quartz (SiO ₂)	
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GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS07 GHS08 GHS09

Signal word Danger

Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Quartz (SiO₂)

Polypropylene glycol, (chloromethyl) oxirane polymer

Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]

Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause cancer. Route of exposure: Inhalative.

May cause damage to the lung through prolonged or repeated exposure. Route of exposure: Inhalative.

Toxic to aquatic life with long lasting effects.

Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

Avoid release to the environment.

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

Take off contaminated clothing and wash before reuse.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

IF ON SKIN: Wash with plenty of water.

Collect spillage.

Store locked up.

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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: Product safety department

Contact:

Seal For Life Technologies & Services B.V.
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Date of preparation / last revision 08/20/2014 / 3

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 1A: Carcinogenicity, Hazard Category 1A
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4

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

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

Product identifier Powercrete J Part B

Trade name: Powercrete J Part B

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

Sector of Use

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Application of the substance / the mixture Epoxy curing agent

Details of the supplier of the safety data sheet

Manufacturer/Supplier: Seal For Life Industries - Powercrete™

Contact details

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mexico@sealforlife.com

Information department: Product safety department of manufacturer / supplier

Emergency telephone number:

For emergency assistance call CHEMTREC (24 hours):

Within USA/Canada 1-800-424-9300; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



GHS09 Environment

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

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GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

Label elements

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

Hazard pictograms



GHS05

GHS07

GHS09

Signal word Danger

Hazard-determining components of labeling:

trimethylhexane-1,6-diamine
(O,O'-Bis(2-aminopropyl)polypropyleneglycol)

Hazard statements

Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.
Very toxic to aquatic life with long lasting effects.

Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of water.
Collect spillage.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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Classification system:

NFPA ratings (scale 0 - 4)



HMIS-ratings (scale 0 - 4)



Other hazards

Results of PBT and vPvB assessment

PBT: Not available.

vPvB: Not available.

3 Composition/information on ingredients

Chemical characterization: Mixtures

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

Dangerous components:

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	50-100%
98-54-4	4-tert-butylphenol ⚠ Eye Dam. 1, H318; ⚠ Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335; H401	25-50%
9046-10-0	(O,O'-Bis(2-aminopropyl)polypropyleneglycol) ⚠ Skin Corr. 1A, H314; Eye Dam. 1, H318; ⚠ Aquatic Chronic 2, H411; H402	5.0-10%

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:

Take affected persons into fresh air and keep quiet.

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:

Flush immediately with plenty of water

If skin irritation continues, consult a doctor.

After eye contact:

Call a doctor immediately.

Rinse opened eye for several minutes under running water.

Remove contact lenses

After swallowing:

Call a doctor immediately.

Do not induce vomiting

Rinse mouth with water

Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing

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:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO₂)

nitrogen containing compounds

In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen cyanide (HCN)

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

Remove persons from danger area.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective clothing.

Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

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

Precautions for safe handling

At all times avoid inhalation of the product and contact with skin and eyes

Ensure appropriate ventilation/exhaust at the workplace.

Keep receptacles tightly sealed.

Information about protection against explosions and fires: No special measures required.

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:

Keep receptacle tightly sealed.

Protect from heat and direct sunlight.

Store in a dry, cool, well ventilated place

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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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

Exposure controls

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.
- Avoid contact with the eyes and skin.
- Do not inhale gases / fumes / aerosols.

Breathing equipment:

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

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

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.

Recommended material:

- Nitrile rubber, NBR
- Butyl rubber, BR
- Neoprene gloves
- PVC gloves

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

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

Form: Fluid
Color: Amber colored

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Odor:	Fish-like
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	236 °C (457 °F)
Flash point:	> 93 °C (> 199 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	230 °C (446 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	0.97 g/cm ³ (8.095 lbs/gal)
Relative density	Not determined.
Vapour 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:	0.0 %
Other information	The material polymerizes to 100% solids, after mixing and reaction with the corresponding "Part A" of the product.

10 Stability and reactivity

Reactivity

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:

Reacts with strong acids.

Reacts with oxidizing agents.

Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides

Ammonia

Hydrogen cyanide (prussic acid)

Nitrogen containing compounds

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Aldehyde

11 Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

25620-58-0 trimethylhexane-1,6-diamine

Oral	LD50	900 mg/kg (rat)
------	------	-----------------

98-54-4 4-tert-butylphenol

Oral	LD50	2951 mg/kg (rat)
------	------	------------------

Dermal	LD50	2288 mg/kg (rabbit)
--------	------	---------------------

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

Oral	LD50	2855 mg/kg (rat)
------	------	------------------

Dermal	LD50	2980 mg/kg (rabbit)
--------	------	---------------------

Primary irritant effect:

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

on the eye: Strong caustic effect.

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.

12 Ecological information

Toxicity

Aquatic toxicity:

No further relevant information available.

25620-58-0 trimethylhexane-1,6-diamine

EC50/24h	31.5 mg/l (Daphnia magna)
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EC50/72h	29.5 mg/l (Algae - Desmodesmus subspicatus)
----------	---

LC50/48h	172 mg/l (Fish - Leuciscus idus)
----------	----------------------------------

98-54-4 4-tert-butylphenol

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

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)
----------	--

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9046-10-0 (O,O'-Bis(2-aminopropyl)polypropyleneglycol)	
EC50/96h	>15 mg/l (Fish - Oncorhynchus mykiss) (OECD 203)
LC50/96h	772 mg/l (Fish - Sheepshead minnow) (OECD 203)
NOEC/72h	0.32 mg/l (Algae - Pseudokirchneriella subcapitata) (OECD 201)
Persistence and degradability	
25620-58-0 trimethylhexane-1,6-diamine	
Biodegradation water	7 % (-)

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Very 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.

Very toxic for aquatic organisms

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even 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.

Dispose safely in accordance with local and national legislations

Delivery to authorized waste disposal contractor only.

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. (Trimethylhexamethylenediamines, 4-tert-butylphenol)
ADR	2735 Amines, liquid, corrosive, n.o.s. (Trimethylhexamethylenediamines, 4-tert-butylphenol), ENVIRONMENTALLY HAZARDOUS
IMDG	AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES, 4-tert-butylphenol), MARINE POLLUTANT
IATA	AMINES, LIQUID, CORROSIVE, N.O.S. (TRIMETHYLHEXAMETHYLENEDIAMINES, 4-tert-butylphenol)

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Transport hazard class(es)	
DOT	
	
Class Label	8 Corrosive substances 8
ADR, IMDG	
	
Class Label	8 Corrosive substances 8
IATA	
	
Class Label	8 Corrosive substances 8
Packing group	
DOT, ADR, IMDG, IATA	III
Environmental hazards:	
Marine pollutant:	Yes Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
Special precautions for user	Warning: Corrosive substances
Danger code (Kemler):	80
EMS Number:	F-A,S-B
Segregation groups	Alkalis
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Remarks:	Special marking with the symbol (fish and tree).
ADR	
Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN2735, Amines, liquid, corrosive, n.o.s. (Trimethylhexamethylenediamines, 4-tert-butylphenol), ENVIRONMENTALLY HAZARDOUS, 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

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.

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 GHS07 GHS09

Signal word Danger

Hazard-determining components of labeling:

trimethylhexane-1,6-diamine
(O,O'-Bis(2-aminopropyl)polypropyleneglycol)

Hazard statements

Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.
Very toxic to aquatic life with long lasting effects.

Precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.
Read label before use.
Do not breathe dust/fume/gas/mist/vapours/spray.

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Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Wash contaminated clothing before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of water.
Collect spillage.
Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
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: Product safety department

Contact:

Seal For Life Technologies & Services B.V.
Gasselterstraat 20, 9503JB Stadskanaal, the Netherlands
Tel: +31 599 696 170; Fax: +31 599 696 177; Email: info@sealforlife.com

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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)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Acute Tox. 4: Acute toxicity, Hazard Category 4
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
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
: Hazardous to the aquatic environment - AcuteHazard, Category 2
: Hazardous to the aquatic environment - AcuteHazard, Category 3
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

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