



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 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

Seal For Life Industries LLC 103 J.L. Farmer Road, Franklin KY, 42134 USA

Tel. (+1) 508-918-1600, Fax. (+1) 508-918-1910, Email: franklin@sealforlife.com

Seal For Life India Private Ltd.

Baroda, India

Tel: +91 2667 264 721, Fax: +91 2667 264 724, Email: india@sealforlife.com

Seal For Life Industries BVBA

Nijverheidsstraat 13, B-2260 Westerlo, Belgium

Tel. +32 14 72 25 00, Fax. +32 14 72 25 70, belgium@sealforlife.com

Seal For Life Industries - Stopaq B.V.

Gasselterstraat 20, 9503JB Stadskanaal, the Netherlands

Tel +31 599 696 170, Fax +31 599 696 177, info@sealforlife.com

Seal For Life Industries Mexico S de R.L. de C.V.

Tijuana, Mexico

Tel USA: +1 858 633 9797, Tel Mx: +52 664 647 4397

Fax USA: +1 858 633 9740, Fax Mx: +52 664 607 9105

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.



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

(Contd. on page 2)





Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 1)



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.

(Contd. on page 3)



Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 2)

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	50-100%
	Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 3, H412	
	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%
	Skin Corr. 1A, H314; Eye Dam. 1, H318; 🅸 Aquatic Chronic 2, H411; H402	

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.

(Contd. on page 4)



Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 3)

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

(Contd. on page 5)



Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 4)

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

(Contd. on page 6)





Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

	(Contd. of page 5
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/cm³ (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/w	vater): 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





Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 6)

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)	
		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)	
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)	
	(Contd. on page 8)	

(Contd. on page 8)



Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 7)

ſ	9046-10-0 (O,O'-Bis(2-aminopropyl)polypropyleneglycol)	
İ	EC50/96h	>15 mg/l (Fish - Oncorhynchus mykiss) (OECD 203)
İ	LC50/96h	772 mg/l (Fish - Sheepshead minnow) (OECD 203)
Į	NOEC/72h	0.32 mg/l (Algae - Pseudokirchneriella subcapitata) (OECD 201)
ſ	Persistence and degradability	

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.

Ecotoxical 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)

(Contd. on page 9)





Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 8)

Transport hazard class(es)

DOT



Class 8 Corrosive substances

Label

ADR, IMDG



Class 8 Corrosive substances

Label

IATA



Class 8 Corrosive substances

Label

Packing group

DOT, ADR, IMDG, IATA

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):80EMS Number:F-A,S-BSegregation groupsAlkalis

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

(Contd. on page 10)



Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 9)

15 Regulatory information

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

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

805 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.





Printing date 08/20/2014 Version 4 Reviewed on 08/20/2014

Trade name: Powercrete J Part B

(Contd. of page 10)

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

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 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.