

Printing date 01/20/2014

Version 1

Reviewed on 01/20/2014

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

Product identifier Powercrete R65/F1-C Part A

Trade name: Powercrete R65/F1-C 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 Coating

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Seal For Life Industries LLC - Powercrete

25 Forge Parkway, Franklin, MA, 02038 USA Tel. (+1) 508-918-1600, Fax. (+1) 508-918-1905, Email: franklin@sealforlife.com

Information department: Product safety department of manufacturer / supplier

Emergency telephone number:

For emergency assistance - Contact Chemtrec (24 hours): Call (800) 424 9300 in USA or Call (703) 527 3887 outside of USA (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture



GHS09 Environment

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

GHS07

Skin Irrit. 2H315Causes skin irritation.Eye Irrit. 2AH319Causes serious eye irritation.Skin Sens. 1H317May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



R36/38-43: Irritating to eyes and skin. May cause sensitisation by skin contact.

 $\mathbf{K}_{\mathbf{A}}$ N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **Information concerning particular hazards for human and environment:** The product has to be labeled due to the calculation procedure of international guidelines.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

GHS label elements

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

(Contd. on page 2)

Reviewed on 01/20/2014

Printing date 01/20/2014

Trade name: Powercrete R65/F1-C Part A

(Contd. of page 1)

Hazard pictograms

GHS07 GHS09

Signal word Warning

Hazard-determining components of labeling: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) **Hazard statements** Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. 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. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. 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. Dispose of contents/container in accordance with local/regional/national/international regulations. **Classification system:** NFPA ratings (scale 0 - 4) Health = 1 Fire = 1Reactivity = 0HMIS-ratings (scale 0 - 4) HEALTH 1 Health = 1 FIRE Fire = 1 1 Reactivity = 0 REACTIVITY 0 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:		
	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Xi R36/38-43; XI R51/53 Aquatic Chronic 2, H411; ♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	50-100%
12001-26-2	Mica	10-25%
SVHC N	lone.	

(Contd. on page 3) USA



Version 1

Printing date 01/20/2014

SEALFORLIFE

Powercrete

Version 1

Reviewed on 01/20/2014

Trade name: Powercrete R65/F1-C Part A

(Contd. of page 2)

4 First-aid measures

Description of first aid measures

After inhalation:

Call a doctor immediately. Take affected persons into fresh air and keep quiet. In case of unconsciousness place patient stably in side position for transportation. **After skin contact:** Call a doctor immediately. Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing If skin irritation continues, consult a doctor. **After eye contact:** Call a doctor immediately. Rinse opened eye for several minutes under running water. Remove any contact lenses **After swallowing:** Do not induce vomiting; immediately call for medical help. 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.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

No further relevant information available

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

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) organic compounds Advice for firefighters

Protective equipment:

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

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Environmental precautions:
Do not allow to enter sewers/ surface or ground water.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to penetrate the ground/soil.
In case of seepage into the ground inform responsible authorities.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
Reference to other sections
See Section 7 for information on safe handling.

Printing date 01/20/2014

SEALFORLIFE

owercrete

Version 1

Reviewed on 01/20/2014

(Contd. of page 3)

Trade name: Powercrete R65/F1-C Part A

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Precautions for safe handling

Ensure appropriate ventilation/exhaust at the workplace. At all times avoid inhalation of the product and contact with skin and eyes

Information about protection against explosions and fires:

No special measures required. Keep ignition sources away - Do not smoke.

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: Do not store together with acids. Do not store together with alkalis (caustic solutions). Do not store together with alkalis (caustic solutions). Do not store together with amines Store away from oxidizing agents. Further information about storage conditions: Keep receptacle tightly sealed. Store in a dry, cool, well ventilated place

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

C	components with limit values that require monitoring at the workplace:	
1200	12001-26-2 Mica	
PEL	Long-term value: 20 mppcf ppm <1% crystalline silica	
REL	Long-term value: 3* mg/m ³ *respirable dust; containing < 1% quartz	
TLV	Long-term value: 3* 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

Printing date 01/20/2014

SEALFORLIFE

owercrete

Version 1

Reviewed on 01/20/2014

Trade name: Powercrete R65/F1-C Part A

(Contd. of page 4)

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.

Recommended material:

Nitrile rubber, NBR

Penetration time of glove material

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

Eye protection:



Tightly sealed goggles

Body protection: Impervious protective clothing

9 Physical and chemical properties	
Information on basic physical and chem	nical properties
General Information	
Appearance:	
Form:	Viscous
Color:	White
Odor:	Characteristic
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:	252 °C (486 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	300 °C (572 °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):	1.32 g/cm ³ (11.015 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.
	(Contd. on page 6



Printing date 01/20/2014

Version 1

Reviewed on 01/20/2014

Trade name: Powercrete R65/F1-C Part A

	(Contd. of page 5)
tanol/water): Not determined.	
Not determined.	
Not determined.	
0.0 %	
No further relevant information available.	
	Not determined. Not determined. 0.0 %

10 Stability and reactivity

Reactivity **Chemical stability** Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. Possibility of hazardous reactions Reacts with acids. Reacts with alkali (lyes). Reacts with strong oxidizing agents. Reacts with amines. Conditions to avoid No further relevant information available. Incompatible materials: Reacts with strong acids. Reacts with oxidizing agents. Strong alkalines Hazardous decomposition products: Carbon monoxide and carbon dioxide Aldehyde

11 Toxicological information

Information on toxicological effects

Acute toxicity: 25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Oral LD50 >2000 mg/kg bw (rat) Dermal LD50 >4000 mg/kg bw (rat) >22000 mg/kg bw (rabbit)

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)		
14807-96-6	Talc (Mg3H2(SiO3)4)	2B
13983-17-0	Natural wollastonite	3
13463-67-7	titanium dioxide	2B
	(Contd. on pa	age 7)
	(JSA —

Printing date 01/20/2014

SEALFORLIFE

Powercrete®

Version 1

Reviewed on 01/20/2014

Trade name: Powercrete R65/F1-C Part A

(Contd. of page 6)

NTP (National Toxicology Program)

None of the ingredients is listed.

12 Ecological information

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) Aquatic toxicity: No further relevant information available. Persistence and degradability No further relevant information available. Bioaccumulative potential No further relevant information available. Mobility in soil No further relevant information available. **Ecotoxical effects:** Remark: Toxic for fish Additional ecological information: General notes: 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. Toxic for aquatic organisms 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 Non-dangerous when mixed and fully cured with accompanying hardener.

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 \leq 700))	
ADR	3082 Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700))	
	(Contd. on page 8)	

— USA –

Printing date 01/20/2014	Version 1	Reviewed on 01/20/2014
Trade name: Powercrete R65/F1-C Part A		
		(Contd. of page 7)
IMDG	N.O.S. (reaction pr	LY HAZARDOUS SUBSTANCE, LIQUID, oduct: bisphenol-A-(epichlorhydrin) epoxy age molecular weight \leq 700)), MARINE
ΙΑΤΑ	N.O.S. (reaction pr	LY HAZARDOUS SUBSTANCE, LIQUID, oduct: bisphenol-A-(epichlorhydrin) epoxy age molecular weight \leq 700))
Transport hazard class(es)		
DOT, ADR, IMDG, IATA		
Class Label	9 Miscellaneou: 9	s dangerous substances and articles.
Packing group DOT, ADR, IMDG, IATA	III	
Environmental hazards:		onmentally hazardous substances: reaction epichlorhydrin) epoxy resin (number average))
Marine pollutant:	Yes Symbol (fish and tr	
Special marking (ADR):	Symbol (fish and tr	ee)
Special marking (IATA):	Symbol (fish and tr	ee)
Special precautions for user Danger code (Kemler): EMS Number:	Warning: Miscellaneou 90 F-A,S-F	is dangerous substances and articles
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code	,	
Transport/Additional information:		
DOT		
Remarks:	Special mar	king with the symbol (fish and tree).
UN "Model Regulation":	(reaction product: k	entally hazardous substances, liquid, n.o.s. bisphenol-A-(epichlorhydrin) epoxy resin nolecular weight \leq 700)), 9, III

15 Regulatory information

Powercrete[®]

Technology

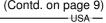
SEALFORLIFE

 \star

Liquid Co

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

Section 355 (extremely hazardous substances):		
None of the ingredients is listed.		
S	ection 313 (Specific toxic chemical listings):	
None of the	None of the ingredients is listed.	
TSC	TSCA (Toxic Substances Control Act):	
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)	
14807-96-6	Talc (Mg3H2(SiO3)4)	
13463-67-7	titanium dioxide	
	(Contd. on page 9)	



Printing date 01/20/2014

SEALFORLIFE

Powercrete

Version 1

Reviewed on 01/20/2014

(Contd. of page 8)

Α4

A4

Trade name: Powercrete R65/F1-C Part A

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)

14807-96-6 Talc (Mg3H2(SiO3)4)

13463-67-7 titanium dioxide

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

13463-67-7 titanium dioxide

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

GHS label elements

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



Signal word Warning

Hazard-determining components of labeling: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) Hazard statements Causes skin irritation. Causes serious eye irritation. May cause an allergic skin reaction. 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. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. 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. Dispose of contents/container in accordance with local/regional/national/international regulations.

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

(Contd. on page 10)



Printing date 01/20/2014

SEALFORLIFE

Powercrete[®]

Version 1

Reviewed on 01/20/2014

Trade name: Powercrete R65/F1-C Part A

(Contd. of page 9)

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 MSDS: 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 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 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)

- USA —