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

**Product identifier**  Powercrete R-65/F1 Part A

**Trade name:**  Powercrete R-65/F1 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)

**Product category**  PC9a  Coatings and paints, thinners, paint removers

**Process category**
- PROC10  Roller application or brushing
- PROC11  Non industrial spraying

**Environmental release category**
- ERC8f  Wide dispersive outdoor use resulting in inclusion into or onto a matrix

**Application of the substance / the mixture**  Epoxy resin

**Uses advised against**

Details of the supplier of the safety data sheet

**Manufacturer/Supplier:**  Seal For Life Industries - Powercrete™

**Contact details**

Seal For Life Industries LLC
25 Forge Parkway, Franklin MA, 02038 USA
Tel. (+1) 800-343-7875, Fax. (+1) 800-328-4822, Email: franklin@sealforlife.com

Seal For Life Industries LLC
2320 Bowling Green Road, Franklin KY, 42134 USA
Tel. (+1) 800-343-7875, Fax. (+1) 800-328-4822, Email: franklin@sealforlife.com

Seal For Life India Private Ltd.
Plot 17, GIDC Savli, Vadodara, Gujarat, Baroda, India - 391775
Tel: +91 266 726 4721, Fax: +91 266 726 4724, 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, Email: 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, Email: info@sealforlife.com

Seal For Life Industries Mexico S de R.L. de C.V.
Calle 11 Norte 11002, Cd Ind Nueva Tijuana, Tijuana Baja California, Mexico, CP 22500
Tel USA: +1 858 633 9797, Tel Mx: +52 664 647 4397, Fax USA: +1 858 633 9740, Fax Mx: +52 664 607 9105
Email: mexico@sealforlife.com

**Information department:**  Occupational product safety department of Seal For Life Industries

**Emergency telephone number:**
For worldwide emergency assistance call CHEMTREC (24 hours):
Within USA/Canada 1-800-424-9300; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

**Classification of the substance or mixture**

**GHS08 Health hazard**

Carc. 2  H351  Suspected of causing cancer. Route of exposure: Inhalation.
Trade name: Powercrete R-65/F1 Part A

---

GHS09 Environment

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

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).

GHS pictograms

Signal word Warning

Hazard-determining components of labeling:
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \( \leq 700 \))
Talc (Mg₃H₂(SiO₃)₄)

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer. Route of exposure: Inhalation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves.
P280 Wear eye protection / face protection.
P273 Avoid release to the environment.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing must not be allowed out of the workplace.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P302+P352 If on skin: Wash with plenty of water.
P363 Wash contaminated clothing before reuse.
P308+P313 If exposed or concerned: Get medical advice/attention.
P333+P331 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.
P362+P364 Take off contaminated clothing and wash it 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.
Trade name: Powercrete R-65/F1 Part A

**vPvB:** Not available.

### 3 Composition/Information on ingredients

**Chemical characterization:** Mixtures

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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Composition/Information on ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>reaction product: bisphenol A-epichlorhydrin epoxy resin (number average molecular weight &lt; 700)</td>
</tr>
<tr>
<td>7727-43-7</td>
<td>barium sulphate, natural</td>
</tr>
<tr>
<td>12001-28-2</td>
<td>mica</td>
</tr>
<tr>
<td>14807-96-6</td>
<td>talc (Mg3H2(SiO3)4)</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
</tr>
</tbody>
</table>

**Dangerous components:**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Description</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>25068-38-6</td>
<td>Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317</td>
<td>25-50%</td>
</tr>
<tr>
<td>7727-43-7</td>
<td>barium sulphate, natural</td>
<td>25-50%</td>
</tr>
<tr>
<td>12001-28-2</td>
<td>Mica</td>
<td>5.0-10.0%</td>
</tr>
<tr>
<td>14807-96-6</td>
<td>talc (Mg3H2(SiO3)4)</td>
<td>2.5-5.0%</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>titanium dioxide</td>
<td>0.1-0.5%</td>
</tr>
</tbody>
</table>

### 4 First-aid measures

**Description of first aid measures**

**General information:** Personal protection for the First Aider.

**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:**
If skin irritation continues, consult a doctor.
Immediately wash with water and soap and rinse thoroughly.

**After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing:**
If symptoms persist consult doctor.

**Information for doctor:**
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.

### 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)

**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
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.
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

Handling:
Precautions for safe handling
Keep receptacles tightly sealed.
Ensure appropriate ventilation/exhaust at the workplace.

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: Prevent any seepage into the ground.
Information about storage in one common storage facility: Store away from oxidizing agents.
Further information about storage conditions: 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

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>7727-43-7 barium sulphate, natural</strong></td>
</tr>
<tr>
<td>PEL Long-term value: 15* 5** mg/m³</td>
</tr>
<tr>
<td>REL Long-term value: 10* 5** mg/m³</td>
</tr>
<tr>
<td>TLV Long-term value: 5* mg/m³</td>
</tr>
<tr>
<td>*total dust **respirable fraction</td>
</tr>
<tr>
<td><strong>12001-26-2 Mica</strong></td>
</tr>
<tr>
<td>PEL Long-term value: 20 mppcf ppm</td>
</tr>
<tr>
<td>REL Long-term value: 3* mg/m³</td>
</tr>
<tr>
<td>TLV Long-term value: 3* mg/m³</td>
</tr>
<tr>
<td>&lt;1% crystalline silica</td>
</tr>
<tr>
<td>*respirable dust; containing &lt; 1% quartz</td>
</tr>
<tr>
<td>*as respirable fraction</td>
</tr>
</tbody>
</table>

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 eat, drink, smoke or sniff 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.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.

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

**Protection of hands:**

![Protective gloves]

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

**Material of gloves**
Butyl rubber, BR
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

### 9 Physical and chemical properties

**Information on basic physical and chemical properties**

**General Information**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance:</strong></td>
<td>Viscous</td>
</tr>
<tr>
<td><strong>Form:</strong></td>
<td>Viscous</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>Whitish</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Light</td>
</tr>
<tr>
<td><strong>Odour threshold:</strong></td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

| **pH-value:**                | Not determined.|

<table>
<thead>
<tr>
<th><strong>Change in condition</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melting point/Melting range:</strong></td>
<td>Undetermined.</td>
</tr>
<tr>
<td><strong>Boiling point/Boiling range:</strong></td>
<td>&gt; 260 °C (&gt; 500 °F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Flash point:</strong></th>
<th>252 °C (486 °F)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Ignition temperature:</strong></td>
<td>&gt; 300 °C (&gt; 572 °F)</td>
</tr>
</tbody>
</table>
## Decomposition temperature
- Not determined.

## Auto igniting
- Product is not self-igniting.

## 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):
- 1.92 g/cm³ (16.022 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: No further relevant information available.

## 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.

## Toxicological information

### Information on toxicological effects

#### Acute toxicity:

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/LC50 (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;2000 (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;4000 (rat)</td>
</tr>
</tbody>
</table>

**ATE (Acute Toxicity Estimates):**

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/LC50 (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;5000 (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;22000 (rabbit)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/LC50 (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;2000 (rat)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt;4000 (rat)</td>
</tr>
</tbody>
</table>

**13463-67-7 titanium dioxide:**

<table>
<thead>
<tr>
<th>Route</th>
<th>LD50/LC50 (mg/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt;5000 (rat)</td>
</tr>
</tbody>
</table>
41.1.0  Dermal LD₅₀ >5000 mg/kg (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**

<table>
<thead>
<tr>
<th>IARC (International Agency for Research on Cancer)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13983-17-0 Natural wollastonite</td>
<td>3</td>
</tr>
<tr>
<td>14807-96-6 Talc (Mg₃H₂(SiO₃)₄)</td>
<td>2B</td>
</tr>
<tr>
<td>13463-67-7 titanium dioxide</td>
<td>2B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NTP (National Toxicology Program)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OSHA-Ca (Occupational Safety &amp; Health Administration)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None of the ingredients is listed.</td>
<td></td>
</tr>
</tbody>
</table>

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.

**Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

**Ecotoxicological effects:**

- **Remark:** Toxic for fish

**Additional ecological information:**

**General notes:**

- Also poisonous for fish and plankton in water bodies.
- 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.
### 14 Transport information

<table>
<thead>
<tr>
<th>UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>UN3082</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>DOT</td>
<td>Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))</td>
</tr>
<tr>
<td></td>
<td>ADR</td>
<td>3082 Environmentally hazardous substances, liquid, n.o.s. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))</td>
</tr>
<tr>
<td></td>
<td>IMDG</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)), MARINE POLLUTANT</td>
</tr>
<tr>
<td></td>
<td>IATA</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700))</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>Class 9 Miscellaneous dangerous substances and articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>III</td>
</tr>
</tbody>
</table>

| Environmental hazards: | Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) |
| Marine pollutant: | Yes |
| 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. |

<table>
<thead>
<tr>
<th>Transport/Additional information:</th>
<th>DOT Quantity limitations On passenger aircraft/rail: No limit On cargo aircraft only: No limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous substance:</td>
<td>20 lbs, 9.08 kg</td>
</tr>
<tr>
<td>Remarks:</td>
<td>Special marking with the symbol (fish and tree).</td>
</tr>
</tbody>
</table>
### 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):
- **7727-43-7** barium sulphate, natural
- **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

#### Proposition 65
- **13463-67-7** titanium dioxide

#### Carcinogenic categories
- **EPA (Environmental Protection Agency)**
  - **7727-43-7** barium sulphate, natural
    - D, CBD(inh), NL(oral)
- **TLV (Threshold Limit Value established by ACGIH)**
  - **14807-96-6** Talc (Mg3H2(SiO3)4) A4
  - **13463-67-7** titanium dioxide A4
- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  - **13463-67-7** titanium dioxide

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

GHS07  GHS08  GHS09

Signal word Warning

Hazard-determining components of labeling:
reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)
Talc (Mg3H2(SiO3)4)

Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer. Route of exposure: Inhalation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P280 Wear protective gloves.
P280 Wear eye protection / face protection.
P273 Avoid release to the environment.
P272 Contaminated work clothing must not be allowed out of the workplace.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P302+P352 If on skin: Wash with plenty of water.
P363 Wash contaminated clothing before reuse.
P305+P313 If exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P313 Collect spillage.
P362+P364 Take off contaminated clothing and wash it 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:
Seal For Life Industries
Gasselterstraat 20, 9503JB Stadskanaal, the Netherlands
Tel: +31 599 696 170; Fax. +31 599 696 177; Email: info@sealforlife.com

Date of preparation / last revision 07/16/2015 / 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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
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. 2: Carcinogenicity, Hazard Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

* Data compared to the previous version altered.
1 Identification of the substance/mixture and of the company/undertaking

Product identifier  Powercrete R-65/F1 Part B

Trade name:  Powercrete R-65/F1 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)

Product category  PC9a  Coatings and paints, thinners, paint removers

Process category
PROC10  Roller application or brushing
PROC11  Non industrial spraying

Environmental release category
ERC8f  Wide dispersive outdoor use resulting in inclusion into or onto a matrix

Application of the substance / the mixture  Epoxy curing agent

Uses advised against -

Details of the supplier of the safety data sheet

Manufacturer/Supplier:  Seal For Life Industries - Powercrete ™

Contact details

Seal For Life Industries LLC
25 Forge Parkway, Franklin MA, 02038 USA
Tel. (+1) 800-343-7875, Fax. (+1) 800-328-4822, Email: franklin@sealforlife.com

Seal For Life Industries LLC
2320 Bowling Green Road, Franklin KY, 42134 USA
Tel. (+1) 800-343-7875 , Fax. (+1) 800-328-4822, Email: franklin@sealforlife.com

Seal For Life India Private Ltd.
Plot17, GIDC Savli, Vadodara, Gujarat, Baroda, India - 391775
Tel: +91 266 726 4721, Fax: +91 266 726 4724, 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, Email: 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, Email: info@sealforlife.com

Seal For Life Industries Mexico S de R.L. de C.V.
Calle 11 Norte 11002, Cd Ind Nueva Tijuana, Tijuana Baja California, Mexico, CP 22500
Tel USA: +1 858 633 9797, Tel Mx: +52 664 647 4397, Fax USA: +1 858 633 9740, Fax Mx: +52 664 607 9105
Email: mexico@sealforlife.com

Information department:  Occupational product safety department of Seal For Life Industries

Emergency telephone number:
For worldwide emergency assistance call CHEMTREC (24 hours):
Within USA/Canada 1-800-424-9300; Outside USA/Canada +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

Classification of the substance or mixture

GHS06 Skull and crossbones

Acute Tox. 3  H331  Toxic if inhaled.
Trade name: Powercrete R-65/F1 Part B

GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Carc. 1A H350 May cause cancer.
Repr. 2 H361 Suspected of damaging fertility or the unborn child.
STOT SE 1 H370-H371 Causes damage to the skin, the respiratory system and the digestive system. Route of exposure: Oral, Inhalation and Dermal. May cause damage to the central nervous system. Route of exposure: Oral, Inhalation.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation, Dermal.

GHS05 Corrosion

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

GHS09 Environment

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

GHS07

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

Label elements

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

Hazard pictograms

GHS05 GHS06 GHS08 GHS09

Signal word Danger

Hazard-determining components of labeling:
Aliphatic amine (Proprietary)
Alkyl ether amine (Proprietary)
Alkyl phenol (Proprietary)
Talc (Mg3H2(SiO3)4)

Hazard statements
H302 Harmful if swallowed.
H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H350 May cause cancer.
H361 Suspected of damaging fertility or the unborn child.
Trade name: Powercrete R-65/F1 Part B

H370-H371 Causes damage to the skin, the respiratory system and the digestive system. Route of exposure: Oral, Inhalation and Dermal. May cause damage to the central nervous system. Route of exposure: Oral, Inhalation.

H373 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation, Dermal.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dusts or mists.
P284 Wear respiratory protection.
P280 Wear protective gloves.
P280 Wear eye protection / face protection.
P273 Avoid release to the environment.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing must not be allowed out of the workplace.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.
P321 Specific treatment (see on this label).
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P363 Wash contaminated clothing before reuse.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P314 Get medical advice/attention if you feel unwell.
P391 Collect spillage.
P435 Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7727-43-7 barium sulphate, natural</td>
<td>10-25%</td>
</tr>
<tr>
<td>Alkyl phenol (Proprietary)</td>
<td>10-25%</td>
</tr>
<tr>
<td>Acute Tox. 3, H331; Resp. Sens. 1, H334; STOT SE 1, H370; STOT RE 2, H373; Skin Corr. 1A, H314; Eye Dam. 1, H318; Aquatic Chronic 2, H411; Aquatic Acute 2, H401</td>
<td></td>
</tr>
<tr>
<td>Alkyl ether amine (Proprietary)</td>
<td>10-25%</td>
</tr>
<tr>
<td>Resp. Sens. 1, H334; STOT SE 1, H370; STOT RE 2, H373; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1, H317</td>
<td></td>
</tr>
<tr>
<td>Aliphatic amine (Proprietary)</td>
<td>10-25%</td>
</tr>
<tr>
<td>Acute Tox. 2, H330; Resp. Sens. 1, H334; STOT SE 1, H370; STOT RE 2, H373; Skin Corr. 1A, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317</td>
<td></td>
</tr>
</tbody>
</table>

US
Trade name: Powercrete R-65/F1 Part B

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Name</th>
<th>Hazard Class</th>
<th>% Amount</th>
<th>Description of first aid measures</th>
</tr>
</thead>
</table>
| 14807-96-8 | Talc (Mg3H2(SiO3)4)                                                   | Carc. 2, H351 | 5.0-10.0% | **Emergency procedures:**
|          |                                                                      |              |          | **First-aid measures:**
|          |                                                                      |              |          | **After inhalation:**
|          |                                                                      |              |          | Call a doctor immediately.
|          |                                                                      |              |          | Take affected persons into fresh air and keep quiet.
|          |                                                                      |              |          | Use a respiration bag or breathing device.
|          |                                                                      |              |          | Do not use mouth to mouth or mouth to nose resuscitation.
|          |                                                                      |              |          | Supply fresh air or oxygen; call for doctor.
|          |                                                                      |              |          | In case of unconsciousness place patient stably in side position for transportation.
|          |                                                                      |              |          | **After skin contact:**
|          |                                                                      |              |          | Call a doctor immediately.
|          |                                                                      |              |          | Rinse opened eye for several minutes under running water. Then consult a doctor.
|          |                                                                      |              |          | **After swallowing:**
|          |                                                                      |              |          | Call a doctor immediately.
|          |                                                                      |              |          | Do not induce vomiting; immediately call for medical help.
|          |                                                                      |              |          | Drink copious amounts of water and provide fresh air. Immediately call a doctor.
| 84852-15-3 | 4-nonylphenol, branched                                              | Resp. 2, H361; Skin Corr. 1B, H314; * Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302 | 5.0-10.0% | **Emergency procedures:**
|          |                                                                      |              |          | **First-aid measures:**
|          |                                                                      |              |          | **After inhalation:**
|          |                                                                      |              |          | Call a doctor immediately.
|          |                                                                      |              |          | Take affected persons into fresh air and keep quiet.
|          |                                                                      |              |          | Use a respiration bag or breathing device.
|          |                                                                      |              |          | Do not use mouth to mouth or mouth to nose resuscitation.
|          |                                                                      |              |          | Supply fresh air or oxygen; call for doctor.
|          |                                                                      |              |          | In case of unconsciousness place patient stably in side position for transportation.
|          |                                                                      |              |          | **After skin contact:**
|          |                                                                      |              |          | Call a doctor immediately.
|          |                                                                      |              |          | Rinse opened eye for several minutes under running water. Then consult a doctor.
|          |                                                                      |              |          | **After swallowing:**
|          |                                                                      |              |          | Call a doctor immediately.
|          |                                                                      |              |          | Do not induce vomiting; immediately call for medical help.
|          |                                                                      |              |          | Drink copious amounts of water and provide fresh air. Immediately call a doctor.
| 12001-26-2 | Mica                                                                | Ox. Liq. 2, H272; Eye Irrit. 2A, H319 | 2.5-5.0% |
| 10124-37-5 | Calcium nitrate, containing in the anhydrous state more than 16 per cent by weight of nitrogen | Ox. Liq. 2, H272; Eye Irrit. 2A, H319 | 1.0-2.5% |
| 545-89-4  | Ethanol                                                             | Flam. Liq. 2, H225; Carc. 1A, H350 | 1.0-2.5% |

**4 First-aid measures**

**Description of first aid measures**

**General information:**
- Personal protection for the First Aider.
- Take affected persons out into the fresh air.
- Provide oxygen treatment if affected person has difficulty breathing.
- 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.
- Remove breathing apparatus only after contaminated clothing have been completely removed.
- In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation:**
- Call a doctor immediately.
- Take affected persons into fresh air and keep quiet.
- Use a respiration bag or breathing device.
- Do not use mouth to mouth or mouth to nose resuscitation.
- Supply fresh air or oxygen; call for doctor.
- In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**
- Call a doctor immediately.
- Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.
- Immediately wash with water and soap and rinse thoroughly.

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

**After swallowing:**
- Call a doctor immediately.
- Do not induce vomiting; immediately call for medical help.
- 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**
  - Headache
  - Dizziness
  - Unconsciousness
  - Coughing
  - Asthma attacks
  - Breathing difficulty
  - Nausea
  - Cramp

**Indication of any immediate medical attention and special treatment needed**
- Medical supervision for at least 48 hours.
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:
- Nitrogen oxides (NOx)
- Carbon monoxide (CO)

Advice for firefighters
Protective equipment:
- Wear self-contained respiratory protective device.
- Wear fully protective suit.
- Mouth respiratory protective device.

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

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation
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.
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

Handling:
Precautions for safe handling
- Keep receptacles tightly sealed.
- Ensure appropriate ventilation/exhaust at the workplace.
- Open and handle receptacle with care.

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

Information about storage in one common storage facility: Store away from oxidizing agents.
Further information about storage conditions:
- Keep receptacle tightly sealed.
- Store in cool, dry conditions in well sealed receptacles.
- Store receptacle in fume compartment.

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

<table>
<thead>
<tr>
<th>Components with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PEL</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>REL</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>TLV</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Aliphatic amine (Proprietary)

| ACGIH TLV | Short-term value: 0.1 mg/m³ |
|           | (1994-09-01) Ceiling Limit Value |
| NIOSH REL | Short-term value: 0.1 mg/m³ |
|           | (1994-06-01) Ceiling Limit Value |
| OSHA PEL  | Short-term value: 0.1 mg/m³ |
|           | (1989-03-01) Ceiling Limit Value |

12001-26-2 Mica

| PEL | Long-term value: 20 mppcf ppm |
|     | <1% crystalline silica |
| REL | Long-term value: 3* mg/m³ |
|     | *respirable dust; containing < 1% quartz |
| TLV | Long-term value: 3* mg/m³ |
|     | *as respirable fraction |

64-17-5 ethanol

| PEL | Long-term value: 1900 mg/m³, 1000 ppm |
| REL | Long-term value: 1900 mg/m³, 1000 ppm |
| TLV | Short-term value: 1880 mg/m³, 1000 ppm |

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.
- Do not eat, drink, smoke or sniff while working.
- Immediately remove all soiled and contaminated clothing.
- Be sure to clean skin thoroughly after work and before breaks.
- Do not inhale gases / fumes / aerosols.
- Avoid contact with the eyes and skin.

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

Protective gloves

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

Material of gloves

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 cannot be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Penetration time of glove material

The exact breakthrough 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

<table>
<thead>
<tr>
<th>Information on basic physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Information</td>
</tr>
<tr>
<td>Appearance:</td>
</tr>
<tr>
<td>Form: Viscous</td>
</tr>
<tr>
<td>Color: Green</td>
</tr>
<tr>
<td>Odor: Amine-like</td>
</tr>
<tr>
<td>Odour threshold: Not determined.</td>
</tr>
<tr>
<td>pH-value: Not determined.</td>
</tr>
<tr>
<td>Change in condition</td>
</tr>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range: Undetermined.</td>
</tr>
<tr>
<td>Flash point: &gt; 200 °C (&gt; 392 °F)</td>
</tr>
<tr>
<td>Flammability (solid, gaseous): Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature: 372 °C (702 °F)</td>
</tr>
<tr>
<td>Decomposition temperature: Not determined.</td>
</tr>
<tr>
<td>Auto igniting: Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion: Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits:</td>
</tr>
<tr>
<td>Lower: Not determined.</td>
</tr>
<tr>
<td>Upper: Not determined.</td>
</tr>
<tr>
<td>Vapor pressure: Not determined.</td>
</tr>
<tr>
<td>Density at 20 °C (68 °F): 1.38 g/cm³ (11.516 lbs/gal)</td>
</tr>
<tr>
<td>Relative density Not determined.</td>
</tr>
<tr>
<td>Vapour density Not determined.</td>
</tr>
</tbody>
</table>
Evaporation rate
Not determined.

Solubility in / Miscibility with Water:
Fully miscible.

Segregation coefficient (n-octanol/water):
Not determined.

Viscosity:
Dynamic:
Not determined.
Kinematic:
Not determined.

Solvent content:
Organic solvents: 1.6 %
VOC: 1.6 %
22.4 g/l / 0.19 lb/gl

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
Reacts with acids.
Reacts with oxidizing agents.

Conditions to avoid
No further relevant information available.

Incompatible materials:
Reacts with strong acids.
Reacts with oxidizing agents.

Hazardous decomposition products:
Nitrogen oxides
Carbon monoxide

11 Toxicological information

Information on toxicological effects

Acute toxicity:

<table>
<thead>
<tr>
<th>LD/LC50 values that are relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (Acute Toxicity Estimates)</td>
</tr>
<tr>
<td>Oral  LD50  1920 mg/kg</td>
</tr>
<tr>
<td>Dermal LD50  5756 mg/kg</td>
</tr>
<tr>
<td>Inhalative LC50/4h  5.81 mg/l</td>
</tr>
<tr>
<td>Alkyl phenol (Proprietary)</td>
</tr>
<tr>
<td>Oral  LD50  &gt;2000 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50  2288 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative LC50/4h  5 mg/l (rat)</td>
</tr>
<tr>
<td>Alkyl ether amine (Proprietary)</td>
</tr>
<tr>
<td>Oral  LD50  910 mg/kg (rat)</td>
</tr>
<tr>
<td>Aliphatic amine (Proprietary)</td>
</tr>
<tr>
<td>Oral  LD50  930 mg/kg (rat)</td>
</tr>
<tr>
<td>Dermal LD50  2000 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative LC50  3.89 mg/kg (rat) (1h)</td>
</tr>
<tr>
<td>LC50/4h  0.8 mg/l (rat) (female)</td>
</tr>
</tbody>
</table>
Trade name: Powercrete R-65/F1 Part B

84852-15-3 4-nonylphenol, branched

<table>
<thead>
<tr>
<th></th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/96h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1412 mg/kg (rat)</td>
<td>1100 mg/kg (ATE)</td>
<td>11 mg/l (ATE)</td>
</tr>
</tbody>
</table>

Oral LD50 500 mg/kg (ATE)

Dermal LD50 1100 mg/kg (ATE)

Inhalative LC50/4h 11 mg/l (ATE)

64-17-5 ethanol

<table>
<thead>
<tr>
<th></th>
<th>Oral LD50</th>
<th>Inhalative LC50/4h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7060 mg/kg (rat)</td>
<td>20000 mg/l (rat)</td>
</tr>
</tbody>
</table>

Primary irritant effect:
- on the skin: 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)
  - 13983-17-0 Natural wollastonite
  - 14807-96-6 Talc (Mg3H2(SiO3)4)
  - 64-17-5 ethanol

- 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:
- Alkyl phenol (Proprietary)
  - LC50/96h 5 mg/l (Fish - Pimephales promelas)

- 84852-15-3 4-nonylphenol, branched
  - EC50/48h 0.14 mg/l (Daphnia magna) (EU Method C.2)
  - EC50/72h 1.3 mg/l (Algae - Desmodesmus subspicatus) (other guideline)
  - LC50/96h 0.23 mg/l (Fish - Oncorhynchus mykiss) (ASTM 1991 E729-88a)
  - 0.126 mg/l (Fish - Pimephales promelas) (ASTM 1991 E729-88a)
  - NOEC/21days 0.024 mg/l (Daphnia magna) (OECD 202 (reproduction))
  - NOEC/91d 0.006 mg/l (Fish - Oncorhynchus mykiss) (Study report acc. ASTM guideline)

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.

Ecotoxic effects:
- Remark: Toxic for fish
Additional ecological information:

**General notes:**
- Must not reach bodies of water or drainage ditch undiluted or unneutralized.
- Also poisonous for fish and plankton in water bodies.
- Toxic for aquatic organisms
- Water hazard class 3 (Self-assessment): extremely hazardous for water
- Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- Danger to drinking water if even extremely small quantities leak into the ground.

**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**
  Polyamines, liquid, corrosive, n.o.s. (Alkyl phenol (Proprietary), Aliphatic amine (Proprietary))
- **ADR**
  2735 Polyamines, liquid, corrosive, n.o.s. (Alkyl phenol (Proprietary), Aliphatic amine (Proprietary)), MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS
- **IMDG**
  POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Alkyl phenol (Proprietary), Aliphatic amine (Proprietary), Alkyl ether amine (Proprietary), 4-nonylphenol, branched), MARINE POLLUTANT
- **IATA**
  POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Alkyl phenol (Proprietary), Aliphatic amine (Proprietary))

**Transport hazard class(es)**

#### DOT
- **Class** 8 Corrosive substances
- **Label** 8

#### ADR, IMDG
- **Class** 8 Corrosive substances
Trade name: Powercrete R-65/F1 Part B

Label 8

IATA

Class 8 Corrosive substances
Label 8

Packing group
DOT, ADR, IMDG, IATA II

Environmental hazards: Product contains environmentally hazardous substances: 4-nonylphenol, branched
Marine pollutant: No
Yes (DOT)
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
Quantity limitations
On passenger aircraft/rail: 1 L
On cargo aircraft only: 30 L
Remarks: Special marking with the symbol (fish and tree).

ADR
Excepted quantities (EQ) Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

IMDG
Limited quantities (LQ) 1 L
Excepted quantities (EQ) Code: E2

UN "Model Regulation": UN2735, Polymamines, liquid, corrosive, n.o.s. (Alkyl phenol (Proprietary), Aliphatic amine (Proprietary)), MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS, 8, II

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):
7727-43-7 barium sulphate, natural
10124-37-5 calcium nitrate, containing in the anhydrous state more than 16 per cent by weight of nitrogen

(Contd. on page 12)
Trade name: Powercrete R-65/F1 Part B

TSCA (Toxic Substances Control Act):

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>7727-43-7</td>
<td>barium sulphate, natural</td>
</tr>
<tr>
<td></td>
<td>Alkyl phenol (Proprietary)</td>
</tr>
<tr>
<td></td>
<td>Alkyl ether amine (Proprietary)</td>
</tr>
<tr>
<td></td>
<td>Aliphatic amine (Proprietary)</td>
</tr>
<tr>
<td>14807-96-6</td>
<td>talc (Mg3H2(SiO3)4)</td>
</tr>
<tr>
<td>84852-15-3</td>
<td>4-nonylphenol, branched</td>
</tr>
<tr>
<td></td>
<td>Alkyl amine (Proprietary)</td>
</tr>
<tr>
<td>10124-37-5</td>
<td>calcium nitrate, containing in the anhydrous state more than 16 per cent by weight of nitrogen</td>
</tr>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
</tr>
<tr>
<td>1328-53-6</td>
<td>polychloro copper phthalocyanine</td>
</tr>
<tr>
<td>57-55-6</td>
<td>propane-1,2-diol</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>ethanol</td>
</tr>
</tbody>
</table>

Carcinogenic categories

<table>
<thead>
<tr>
<th>Agency</th>
<th>Chemical Name</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>7727-43-7 barium sulphate, natural</td>
<td>D, CBD(inh), NL(oral)</td>
</tr>
<tr>
<td>TLV (Threshold Limit Value established by ACGIH)</td>
<td>14807-96-6 talc (Mg3H2(SiO3)4)</td>
<td>A4</td>
</tr>
<tr>
<td></td>
<td>64-17-5 ethanol</td>
<td>A3</td>
</tr>
</tbody>
</table>

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

None of the ingredients is listed.

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

Hazard pictograms

GHS05  GHS06  GHS08  GHS09

Signal word: Danger

Hazard-determining components of labeling:
Aliphatic amine (Proprietary)
Alkyl ether amine (Proprietary)
Alkyl phenol (Proprietary)
talc (Mg3H2(SiO3)4)

Hazard statements

<table>
<thead>
<tr>
<th>Hazard Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled.</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H334</td>
<td>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer.</td>
</tr>
</tbody>
</table>
H361  Suspected of damaging fertility or the unborn child.
H370-H371 Causes damage to the skin, the respiratory system and the digestive system. Route of exposure: Oral, Inhalation and Dermal. May cause damage to the central nervous system. Route of exposure: Oral, Inhalation.
H373  May cause damage to organs through prolonged or repeated exposure. Route of exposure: Oral, Inhalation, Dermal.
H411  Toxic to aquatic life with long lasting effects.

Precautionary statements
P260  Do not breathe dusts or mists.
P284  Wear respiratory protection.
P280  Wear protective gloves.
P280  Wear eye protection / face protection.
P273  Avoid release to the environment.
P264  Wash thoroughly after handling.
P270  Do not eat, drink or smoke when using this product.
P271  Use only outdoors or in a well-ventilated area.
P272  Contaminated work clothing must not be allowed out of the workplace.
P201  Obtain special instructions before use.
P202  Do not handle until all safety precautions have been read and understood.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310  Immediately call a poison center/doctor.
P321  Specific treatment (see on this label).
P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
P363  Wash contaminated clothing before reuse.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P333+P331 IF skin irritation or rash occurs: Get medical advice/attention.
P314  Get medical advice/attention if you feel unwell.
P391  Collect spillage.
P405  Store locked up.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501  Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Date of preparation / last revision 07/20/2015 / 5

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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Safety Data Sheet
acc. to OSHA HCS

Printing date 07/20/2015 Reviewed on 07/20/2015
Version 6

Trade name: Powercrete R-65/F1 Part B

(Contd. of page 13)

Ox. Liq. 2: Oxidising Liquids, Hazard Category 2
Acute Tox. 4: Acute toxicity, Hazard Category 4
Acute Tox. 2: Acute toxicity, Hazard Category 2
Acute Tox. 3: Acute toxicity, Hazard Category 3
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 1A: Carcinogenicity, Hazard Category 1A
Carc. 2: Carcinogenicity, Hazard Category 2
Repr. 2: Reproductive toxicity, Hazard Category 2
STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
Aquatic Acute 2: Hazardous to the aquatic environment - Acute Hazard, Category 2
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

* Data compared to the previous version altered.