SECTION 1: Identification

1.1. Product identifier
Product form : Mixture
Product name : Polycarboxylate Cement System - Base
Synonyms : PCA Cement

1.2. Relevant identified uses of the substance or mixture and uses advised against
For professional dental use only.

1.3. Details of the supplier of the safety data sheet
Henry Schein, Inc.
135 Duryea Road
Melville, NY 11747
Telephone: 1-800-424-9300
www.henryschein.com

1.4. Emergency telephone number
Emergency number : 800-424-9300 CHEMTREC; 1-703-527-3887 CHEMTREC - Outside USA

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)
Not applicable

2.2. Label elements
GHS-US labeling
Not applicable

2.3. Other hazards
Very toxic to aquatic life with long lasting effects. Avoid release to the environment.

2.4. Unknown acute toxicity (GHS-US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc oxide</td>
<td>(CAS No) 1314-13-2</td>
<td>&lt; 89.91</td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>Sodium fluoride</td>
<td>(CAS No) 7681-49-4</td>
<td>0.1 - 1</td>
<td>Acute Tox. 3 (Oral), H301</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 3, H402</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

First-aid measures after skin contact : Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

- **Symptoms/injuries after inhalation**: None expected under normal conditions of use.
- **Symptoms/injuries after skin contact**: May cause mild skin irritation.
- **Symptoms/injuries after eye contact**: May cause slight irritation to eyes.
- **Symptoms/injuries after ingestion**: May be harmful if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

If exposed or concerned, get medical advice and attention.

#### SECTION 5: Fire-Fighting measures

**5.1. Extinguishing media**

- **Suitable extinguishing media**: Use extinguishing media appropriate for surrounding fire.
- **Unsuitable extinguishing media**: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

**5.2. Special hazards arising from the substance or mixture**

- **Fire hazard**: Not considered flammable but may burn at high temperatures.
- **Explosion hazard**: Product is not explosive.
- **Reactivity**: No reactivity hazard.

**5.3. Advice for firefighters**

- **Precautionary measures fire**: Exercise caution when fighting any chemical fire.
- **Firefighting instructions**: Use water spray or fog for cooling exposed containers.
- **Protection during firefighting**: Do not enter fire area without proper protective equipment, including respiratory protection.

#### SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

- **General measures**: Avoid all contact with skin, eyes, or clothing.

**6.1.1. For non-emergency personnel**

- **Protective equipment**: Use appropriate personal protection equipment (PPE).
- **Emergency procedures**: Evacuate unnecessary personnel.

**6.1.2. For emergency responders**

- **Protective equipment**: Equip cleanup crew with proper protection.
- **Emergency procedures**: Ventilate area.

**6.2. Environmental precautions**

Avoid release to the environment. Prevent entry to sewers and public waters. Contact competent authorities after a spill.

**6.3. Methods and material for containment and cleaning up**

- **For containment**: Absorb and/or contain spill with inert material, then place in suitable container.
- **Methods for cleaning up**: Clear up spills immediately and dispose of waste safely.

**6.4. Reference to other sections**

See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.

#### SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

- **Hygiene measures**: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.
7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.


7.3. Specific end use(s)

For professional dental use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>USA ACGIH</th>
<th>USA OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc oxide (1314-13-2)</td>
<td>ACGIH TWA (mg/m³)</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
</tr>
<tr>
<td></td>
<td>2 mg/m³ (respirable fraction)</td>
<td>5 mg/m³ (fume)</td>
</tr>
<tr>
<td></td>
<td>ACGIH STEL (mg/m³)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 mg/m³ (respirable fraction)</td>
<td>15 mg/m³ (total dust)</td>
</tr>
</tbody>
</table>

Sodium fluoride (7681-49-4)

<table>
<thead>
<tr>
<th>Substance</th>
<th>USA ACGIH</th>
<th>USA OSHA</th>
<th>USA NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TLV</td>
<td>PEL</td>
<td>REL</td>
</tr>
<tr>
<td></td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.


Hand protection: Wear chemically resistant protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Environmental exposure controls: Do not allow the product to be released into the environment.

Other information: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>No data available</td>
</tr>
<tr>
<td>Color</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Polycarboxylate Cement System - Base
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
Partition coefficient: n-octanol/water : No data available
Viscosity : No data available

9.2. Other information
VOC content : < 1 %

SECTION 10: Stability and reactivity

10.1. Reactivity
No reactivity hazard.

10.2. Chemical stability
Product is stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified

Sodium fluoride (7681-49-4)
LD50 oral rat : 52 mg/kg

Zinc oxide (1314-13-2)
LD50 oral rat : > 5000 mg/kg
LD50 dermal rat : > 2000 mg/kg
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Sodium fluoride (7681-49-4)
IARC group 3
Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified
Specific target organ toxicity (repeated exposure) : Not classified
Aspiration hazard : Not classified
Symptoms/injuries after inhalation : None expected under normal conditions of use.
Symptoms/injuries after skin contact : May cause mild skin irritation.
Symptoms/injuries after eye contact : May cause slight irritation to eyes.
Symptoms/injuries after ingestion : May be harmful if swallowed.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : Very toxic to aquatic life with long lasting effects.
Polycarboxylate Cement System - Base
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Sodium fluoride (7681-49-4)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>&gt; 530 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>338 mg/l (Exposure time: 48 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td>LC50 fish 2</td>
<td>830 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [semi-static])</td>
</tr>
<tr>
<td>EC50 Daphnia 2</td>
<td>98 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zinc oxide (1314-13-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>780 μg/l (Exposure time: 96 h - Species: Pimephales promelas)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>0.122 mg/l</td>
</tr>
<tr>
<td>NOEC chronic fish</td>
<td>0.026 mg/l (Species: Jordanella floridai)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number
UN-No.(DOT) : 3077

14.2. UN proper shipping name
DOT Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Zinc Oxide)
Department of Transportation (DOT) Hazard Classes: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)

DOT Symbols: G - Identifies PSN requiring a technical name
Packing group (DOT): III - Minor Danger
DOT Special Provisions (49 CFR 172.102) | 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description “Other regulated substances, liquid or solid, n.o.s.”, as appropriate. In addition, for solid materials, special provision B54 applies.

146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination.

335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as “Environmentally hazardous substances, solid, n.o.s.” UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging.

A112 - Notwithstanding the quantity limits shown in Column (9A) and (9B) for this entry, the following IBCs are authorized for transportation aboard passenger and cargo-only aircraft. Each IBC may not exceed a maximum net quantity of 1,000 kg:

- b. Rigid plastics: 11H1, 11H2, 21H1 and 21H2
- c. Composite with plastic inner receptacle: 11HZ1, 11HZ2, 21HZ1 and 21HZ2
- d. Fiberboard: 11G
- e. Wooden: 11C, 11D and 11F (with inner liners)
- f. Flexible: 13H2, 13H3, 13H4, 13H5, 13L2, 13L3, 13L4, 13M1 and 13M2 (flexible IBCs must be sift-proof and water resistant or must be fitted with a sift-proof and water resistant liner).

B54 - Open-top, sift-proof rail cars are also authorized.

IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).

IP3 - Flexible IBCs must be sift-proof and water-resistant or must be fitted with a sift-proof and water-resistant liner.

N20 - A 5M1 multi-wall paper bag is authorized if transported in a closed transport vehicle.

T1 - 1.5 178.274(d)(2) Normal.......... 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.
14.3. Additional information

Transport by sea
DOT Vessel Stowage Location: A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

Air transport
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): No limit

SECTION 15: Regulatory information

15.1. US Federal regulations

Sodium fluoride (7681-49-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Zinc oxide (1314-13-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations

Sodium fluoride (7681-49-4)
RTK - U.S. - Massachusetts - Right To Know List
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
RTK - U.S. - Pennsylvania - RTK (Right to Know) List

Zinc oxide (1314-13-2)
RTK - U.S. - Massachusetts - Right To Know List
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
RTK - U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
RTK - U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information, including date of preparation or last revision

Revision date: 10/07/2014
Other information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Oral)</th>
<th>Acute toxicity (oral) Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Polycarboxylate Cement System - Catalyst

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 10/16/2014 Date of issue: 10/16/2014 Version: 1.0

SECTION 1: Identification

1.1. Product identifier
Product form: Substance
Substance name: Polycarboxylate Cement System - Catalyst
CAS No: 9003-01-4

1.2. Relevant identified uses of the substance or mixture and uses advised against
For professional dental use only.

1.3. Details of the supplier of the safety data sheet
Henry Schein, Inc.
135 Duryea Road
Melville, NY 11747
Telephone: 1-800-424-9300
www.henryschein.com

1.4. Emergency telephone number
Emergency number: 800-424-9300 CHEMTREC; 1-703-527-3887 CHEMTREC - Outside USA

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)
Comb. Dust

2.2. Label elements
GHS-US labeling
Signal word (GHS-US): Warning
Hazard statements (GHS-US): May form combustible dust concentrations in air

2.3. Other hazards
Other hazards not contributing to the classification: No additional information available

2.4. Unknown acute toxicity (GHS-US)
No data available

SECTION 3: Composition/information on ingredients

3.1. Substance
Name: Polycarboxylate Cement System - Catalyst
CAS No: 9003-01-4

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic resin</td>
<td>(CAS No) 9003-01-4</td>
<td>100</td>
<td>Comb. Dust</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

3.2. Mixture
Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

First-aid measures after skin contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. Seek medical attention if ill effect or irritation develops.

First-aid measures after eye contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.
First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: May cause slight irritation to eyes, respiratory tract, and/or skin.
Symptoms/injuries after inhalation: Dust from this product may cause irritation to the respiratory tract.
Symptoms/injuries after skin contact: May cause mild skin irritation.
Symptoms/injuries after eye contact: May cause slight irritation to eyes.
Symptoms/injuries after ingestion: Ingestion is likely to be harmful or have adverse effects.

4.3. Indication of any immediate medical attention and special treatment needed
If exposed or concerned, get medical advice and attention.

SECTION 5: Fire-Fighting measures
5.1. Extinguishing media
Suitable extinguishing media: Water spray, fog.
Unsuitable extinguishing media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Combustible Dust.
Explosion hazard: Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.
Reactivity: Reacts with (strong) oxidizers: (increased) risk of fire.

5.3. Advice for firefighters
Precautionary measures fire: Fight fire from safe distance and protected location.
Firefighting instructions: Use water spray or fog for cooling exposed containers.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Other information: Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General measures: Avoid all contact with skin, eyes, or clothing. Do not breathe dust. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid generating dust. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For non-emergency personnel
Protective equipment: Use appropriate personal protection equipment (PPE).
Emergency procedures: Evacuate unnecessary personnel. Avoid creating or spreading dust.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area. Eliminate ignition sources. If possible, stop flow of product.

6.2. Environmental precautions
Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up
For containment: Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting.
Methods for cleaning up: Use only non-sparking tools. Avoid actions that cause dust to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust.

6.4. Reference to other sections
See heading 8, Exposure Controls and Personal Protection. Concerning disposal elimination after cleaning, see item 13.
SECTION 7: Handling and storage

7.1. Precautions for safe handling
Additional hazards when processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion, keep dust levels to a minimum and follow applicable regulations.

Hygiene measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store outdoors with proper provisions for containment or in ventilated indoor areas equipped to confine dusts. Keep container closed when not in use. Keep away from heat, sparks and flame.


7.3. Specific end use(s)
For professional dental use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

8.2. Exposure controls
Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. Use explosion-proof equipment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Ensure all national/local regulations are observed.


Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or safety glasses.
Skin and body protection: Wear suitable protective clothing.
Respiratory protection: When manufacturing or handling product in large quantities and dusts or particulates may be generated, maintain airborne concentrations below recommended limits. Workplace risk assessments should be completed before specifying and implementing respirator usage. NIOSH/MSHA approved respirators for protection should be used if respirators are found to be necessary.

Other information: When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Solid
Appearance: No data available
Color: No data available
Odor: No data available
Odor threshold: No data available
Polycarboxylate Cement System - Catalyst
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
VOC content : < 1 %

SECTION 10: Stability and reactivity

10.1. Reactivity
Reacts with (strong) oxidizers: (increased) risk of fire.

10.2. Chemical stability
Product is stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
Sparks, heat, open flame and other sources of ignition. Direct sunlight. Avoid creating or spreading dust.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity : Not classified
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

<table>
<thead>
<tr>
<th>Acrylic resin (9003-01-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
</tr>
<tr>
<td>Aspiration hazard</td>
</tr>
<tr>
<td>Symptoms/Injuries after inhalation</td>
</tr>
<tr>
<td>Symptoms/Injuries after skin contact</td>
</tr>
<tr>
<td>Symptoms/Injuries after eye contact</td>
</tr>
<tr>
<td>Symptoms/Injuries after ingestion</td>
</tr>
</tbody>
</table>
Polycarboxylate Cement System - Catalyst
Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity
Acrylic resin (9003-01-4)
LC50 fish 1 580 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number
Not applicable

14.2. UN proper shipping name
Not applicable

14.3. Additional information
Other information: No supplementary information available.

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
Polycarboxylate Cement System - Catalyst (9003-01-4)
SARA Section 311/312 Hazard Classes Fire hazard
Acrylic resin (9003-01-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. US State regulations
Not applicable

SECTION 16: Other information, including date of preparation or last revision

Revision date: 10/16/2014
Other information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Full text of H-phrases:

Comb. Dust Combustible Dust
Comb. Dust May form combustible dust concentrations in air

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom 2012)