1 Identification

· Product identifier
· Trade name: GC RELINE (Powder)
· Application of the substance / the mixture: Manufacture of dental prothesis
· Details of the supplier of the safety data sheet
· Manufacturer/Supplier:
  GC America Inc.
  3737 W. 127th Street
  Alsip, IL 60803
  USA
  sds@gcamerica.com
· Information department: Regulatory Affairs
· Emergency telephone number:
  During normal opening times (Mon.-Fri. 8:00 AM-5:00 PM CST): +1 (708) 597-0900
  Transportation (CHEMTREC®) Emergency Telephone No. +1 (800) 424-9300

2 Hazard identification

· Classification of the substance or mixture
  Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.
· Additional information:
  The information provided is in regards to the toxicity and hazard rating(s) of the individual component(s) in the formulation. The associated risk(s) depends on the route(s) of exposure. The hazard rating system is based entirely on the existence of the risk(s) and does not take into account the likelihood of reduced risk(s) through proper usage and handling.
· Label elements
· GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).
· Hazard pictograms

⚠️
GHS07

· Signal word: Warning
· Hazard-determining components of labeling:
  dibenzoyl peroxide
· Hazard statements
  May cause an allergic skin reaction.
· Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapours/spray.
  Contaminated work clothing should not be allowed out of the workplace.
  Wear protective gloves.
  If skin irritation or rash occurs: Get medical advice/attention.
  Specific treatment (see on this label).
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
Trade name: GC RELINE (Powder)

- Classification system:
  - NFPA ratings (scale 0 - 4)
    - Health = 1
    - Fire = 1
    - Reactivity = 1

- HMIS-ratings (scale 0 - 4)
  - Health = 1
  - Fire = 1
  - Reactivity = 1

3 Composition/Information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:
<table>
<thead>
<tr>
<th>Substance</th>
<th>% w/w</th>
</tr>
</thead>
<tbody>
<tr>
<td>poly(ethyl methacrylate)</td>
<td>1 - 5%</td>
</tr>
<tr>
<td>dibenzoyl peroxide</td>
<td>≤ 1%</td>
</tr>
</tbody>
</table>

- Additional information:
  If a substance is marked with **, then substance is a trade secret. This is allowed under OSHA’s Hazard Communication Standard (HCS) as a trade secret and under GHS as Confidential Business Information (CBI).

4 First aid measures

- Description of first aid measures
- General information:
  - Immediately remove any clothing soiled by the product.
  - If symptoms persist consult doctor.
- After inhalation:
  - Supply fresh air; consult doctor in case of complaints.
  - In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  - Immediately wash with water and soap and rinse thoroughly.
  - Seek medical treatment.
- After eye contact:
  - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing:
  - Rinse out mouth and then drink plenty of water.
  - If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: Allergic reactions
  - Indication of any immediate medical attention and special treatment needed
  - No further relevant information available.
5 Firefighting measures

· Extinguishing media
· Suitable extinguishing agents:
  CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.
· For safety reasons unsuitable extinguishing agents: Water with full jet
· Special hazards arising from the substance or mixture
  In case of fire, the following can be released:
  Carbon monoxide and carbon dioxide
· Advice for firefighters
· Protective equipment: Wear self-contained respiratory protective device.
· Additional information
  Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Remove persons from danger area.
  Avoid formation of dust.
  Avoid contact with the eyes and skin.
  Wear protective clothing.
· Environmental precautions:
  Do not allow product to reach sewage system or any water course.
  Do not allow to penetrate the ground/soil.
· Methods and material for containment and cleaning up:
  Pick up mechanically.
  Prevent formation of dust.
  Dispose of the collected material according to regulations.
· 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
  Observe instructions for use.
  Prevent formation of dust.
  Any deposit of dust which cannot be avoided must be regularly removed.
  Avoid contact with the eyes and skin.
· Information about protection against explosions and fires:
  Dust can combine with air to form an explosive mixture.
· Conditions for safe storage, including any incompatibilities
· Storage:
· Requirements to be met by storerooms and receptacles:
  Store only in unopened original receptacles.
· Information about storage in one common storage facility: Store away from foodstuffs.
Trade name: GC RELINE (Powder)

Further information about storage conditions:
- Observe instructions for use / storage.
- Keep receptacle tightly sealed.

Specific end use(s): No further relevant information available.

8 Exposure controls/ Personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Control parameters

- Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS</th>
<th>EL Long-term value: 5 mg/m³</th>
<th>EV Long-term value: 5 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 94-36-0 dibenzoyl peroxide</td>
<td></td>
<td></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:
    The usual precautionary measures for handling chemicals should be followed.
    Do not inhale dust / smoke / mist.
    Avoid contact with the eyes and skin.
    Wash hands before breaks and at the end of work.
    Immediately remove all soiled and contaminated clothing.

- Breathing equipment:
  Suitable respiratory protective device recommended.

- Protection of hands:
  Protective gloves

- Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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

- Eye protection: Safety glasses
### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
  - **General Information**
    - **Appearance:** Powder
    - **Color:** Dark pink to light red
    - **Odor:** Odorless
    - **Odor threshold:** Not determined.
  - **pH-value:** Not applicable.
  - **Change in condition**
    - **Melting point/Melting range:** Undetermined.
    - **Boiling point/Boiling range:** Undetermined.
  - **Flash point:** Not applicable.
  - **Flammability (solid, gaseous):** Not determined.
  - **Ignition temperature:** Undetermined.
  - **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 applicable.
  - **Density:** Not determined.
  - **Relative density:** Not determined.
  - **Vapor density:** Not applicable.
  - **Evaporation rate:** Not applicable.
  - **Solubility in / Miscibility with Water:** Insoluble.
  - **Partition coefficient (n-octanol/water):** Not determined.
  - **Viscosity:**
    - **Dynamic:** Not applicable.
    - **Kinematic:** Not applicable.
  - **Solvent content:**
    - **Water:** 0.0 %
  - **Solids content:** 100.0 %
  - **Other information** No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable at ambient temperature.
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid:
Keep away from heat.
High heat

Incompatible materials: No further relevant information available.

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

Information on toxicological effects

Acute toxicity:
LD/LC50 values that are relevant for classification: No further relevant information available.

Primary irritant effect:
on the skin: No irritant effect.
on the eye: No irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

Carcinogenic categories

IARC (International Agency for Research on Cancer)
silicon dioxide 3
dibenzoyl peroxide 3
silicon dioxide, amorphous 3
titanium dioxide 2B

NTP (National Toxicology Program)
None of the ingredients is listed.

Carcinogenic categories’ legend:
IARC Group 1: The agent is carcinogenic to humans.
IARC Group 2A: The agent is probably carcinogenic to humans.
IARC Group 2B: The agent is possibly carcinogenic to humans.
IARC Group 3: The agent is not classifiable as to its carcinogenicity to humans.
IARC Group 4: The agent is probably not carcinogenic to humans.
NTP K: Known to be human carcinogen.
NTP R: Reasonably anticipated to be human carcinogen.
Repeated dose toxicity: No further relevant information available.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
No further relevant information available.
No further relevant information available.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
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.
Safety Data Sheet  
according to HPR, Schedule 1

Trade name: GC RELINE (Powder)

- **Additional ecological information:**
  - **General notes:** Generally not hazardous for water
  - **Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:** Smaller quantities can be disposed of with household waste.

- **Uncleaned packagings**
  - **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
  - DOT, TDG, ADN, IMDG, IATA: Void

- **UN proper shipping name**
  - DOT, TDG, ADN, IMDG, IATA: Void

- **Transport hazard class(es)**
  - DOT, TDG, ADN, IMDG, IATA: Void

- **Packing group**
  - DOT, TDG, IMDG, IATA: Void

- **Environmental hazards**
  - **Marine pollutant:** No

- **Special precautions for user**
  - Not applicable.

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
  - Not applicable.

- **UN "Model Regulation"**
  - Void

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **SARA (Superfund Amendments and Reauthorization Act)**
    - **Section 355 (extremely hazardous substances):** None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**
  - dibenzoyl peroxide

- **TSCA (Toxic Substances Control Act):**
  - Polyethylmethacrylate
Trade name: GC RELINE (Powder)

- **Canadian substance listings:**
  - **Canadian Domestic Substances List (DSL)**
    - Polyethylmethacrylate
    - silicon dioxide
    - dibenzoyl peroxide
    - titanium dioxide
    - water
    - C.I. Pigment Red 178
    - iron hydroxide oxide yellow
    - C.I. Pigment Blue 29
  - **Canadian Ingredient Disclosure list (limit 0.1%)**
    - None of the ingredients is listed.
  - **Canadian Ingredient Disclosure list (limit 1%)**
    - None of the ingredients is listed.

- **GHS label elements**
  - The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**
  - ![GHS07](image)

- **Signal word** Warning
- **Hazard-determining components of labeling:**
  - dibenzoyl peroxide
- **Hazard statements**
  - May cause an allergic skin reaction.
- **Precautionary statements**
  - Avoid breathing dust/fume/gas/mist/vapours/spray.
  - Contaminated work clothing should not be allowed out of the workplace.
  - Wear protective gloves.
  - If skin irritation or rash occurs: Get medical advice/attention.
  - Specific treatment (see on this label).
  - 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

- **Department issuing SDS:** Regulatory Affairs
- **Contact:**
  - Regulatory Affairs
  - Telephone No. +1 (708) 597-0900
  - sds@gcamerica.com
- **Date of preparation / last revision** 03/13/2018 / -
Abbreviations and acronyms:

GHS: Globally Harmonized System of Classification and Labelling of Chemicals
HCS: Hazard Communication Standard (USA)
MSDS: Material Safety Data Sheet
SDS: Safety Data Sheet
ADN: Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures
ECHA: European Chemicals Agency
OSHA: Occupational Safety and Health Administration (USA)
C.I.: Colour Index
LEL: Lower Explosive Limit
UEL: Upper Explosive Limit
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Sources

• Manufacturers’ MSDS/SDSs
• OSHA (https://www.osha.gov/dts/chemicalsampling/toc/chmcas.html)
• TOXNET (http://toxnet.nlm.nih.gov/)
• ECHA (http://echa.europa.eu/)
• EnviChem (www.echemportal.org)

Notes:

CAS Registry Number is a Registered Trademark of the American Chemical Society.
CHEMTREC® is a registered service mark of the American Chemistry Council, Inc.

• * Data compared to the previous version altered. This version replaces all previous versions.

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