1 Identification

- **Product identifier**
- **Trade name**: EXAFLEX PUTTY (Base)

- **Relevant identified uses of the substance or mixture and uses advised against**
  - Dental material
  - The product is intended for professional use.
  - To avoid risks for humans and environment obtain instructions.

- **Application of the substance / the mixture**
  - Dental impression material

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    GC America Inc.
    3737 W. 127th Street
    Alsip, IL 60803
    USA
    
    sdsgcamerica.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(s) identification

- **Classification of the substance or mixture**
  - Acute Tox. 4 H332 Harmful if inhaled.
  - STOT SE 3 H335 May cause respiratory irritation.
  - Eye Irrit. 2B H320 Causes eye irritation.

- **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 statements**
  - Harmful if inhaled.
  - Causes eye irritation.
  - May cause respiratory irritation.
Safety Data Sheet
acc. to OSHA HCS 29 CFR 1910.1200

Printing date 02/24/2015 Reviewed on 02/24/2015

Trade name: EXAFLEX PUTTY (Base)

- Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  Call a poison center/doctor if you feel unwell.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

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

- Other hazards
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

3 Composition/information on ingredients

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

- Dangerous components:
  112926-00-8 silicon dioxide, amorphous 60-80%
  polyethylene glycol derivative** 5-10%

- 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 or oxygen; call for doctor.
  In case of unconsciousness place patient stably in side position for transportation.
  Do not use mouth to mouth or mouth to nose resuscitation.
- After skin contact:
  Rinse with warm water.
  If symptoms persist consult doctor.
**4.0.1.1**

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

- **After swallowing:**
  Rinse out mouth and then drink plenty of water.
  If symptoms persist consult doctor.

**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.
  - **For safety reasons unsuitable extinguishing agents:** Water with full jet
  - **Special hazards arising from the substance or mixture**
    Formation of toxic gases is possible during heating or in case of fire.

- **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.
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to penetrate the ground/soil.
  In case of seepage into the ground inform responsible authorities.

- **Methods and material for containment and cleaning up:**
  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.
    - Ensure good ventilation/exhaustion at the workplace.
    - Prevent formation of dust.
    - Do not inhale dust / smoke / mist.
    - 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.

- **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.
  - **Further information about storage conditions:**
    - Observe instructions for use / storage.
  - **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:**
    | Substance          | Limit Value          |
    |--------------------|----------------------|
    | Silicon dioxide   | Long-term value: 2 mg/m³ |
    |                    | 20mppcf or 80mg/m³ %SiO₂; 1mppcf = 0.1 mg/m³ |
    | REL                | Long-term value: 6 mg/m³ |
    | TLV                | TLV Withdrawn |

- **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.
# Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Pasty</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>160 °C (320 °F)</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous)</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Ignition temperature</strong></td>
<td>Undetermined.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Auto igniting</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Density at 20 °C (68 °F):</strong></td>
<td>1.67 g/cm³ (13.936 lbs/gal)</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water</strong></td>
<td>Insoluble.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solvent content</strong></td>
<td></td>
</tr>
<tr>
<td>Organic solvents</td>
<td>0.0 %</td>
</tr>
<tr>
<td><strong>Solids content</strong></td>
<td>100.0 %</td>
</tr>
</tbody>
</table>
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**: No further relevant information available.
- **Incompatible materials**: No further relevant information available.
- **Hazardous decomposition products**: No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**: No further relevant information available.
- **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**: Irritating effect.
- **Sensitization**: No sensitizing effects known.
- **Additional toxicological information**:
The product shows the following dangers according to internally approved calculation methods for preparations:
  - Irritant

- **Carcinogenic categories**
  - **IARC (International Agency for Research on Cancer)**
    - silicon dioxide, amorphous: 3
    - antimony nickel titanium oxide yellow: 3
  - **NTP (National Toxicology Program)**
    None of the ingredients is listed.
  - **OSHA-Ca (Occupational Safety & Health Administration)**
    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.
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.
- **Additional ecological information:**
  - **General notes:**
    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 applicable.
    - **vPvB:** Not applicable.
  - **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, ADN, IMDG, IATA
    Void
- **UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA
    Void
- **Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA
    Void
- **Packing group**
  - DOT, ADR, 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.
### 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):**
      None of the ingredients is listed.
  - **TSCA (Toxic Substances Control Act):**
    - vinyl dimethylpolysiloxane
    - polyethylene glycol derivative**
    - antimony nickel titanium oxide yellow
  - **Carcinogenic categories**
    - None of the ingredients is listed.
  - **EPA (Environmental Protection Agency)**
    - None of the ingredients is listed.
  - **TLV (Threshold Limit Value established by ACGIH)**
    - antimony nickel titanium oxide yellow A4
  - **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**
  - ![](image) GHS07
  - **Signal word** Warning
  - **Hazard statements**
    - Harmful if inhaled.
    - Causes eye irritation.
    - May cause respiratory irritation.
  - **Precautionary statements**
    - Avoid breathing dust/fume/gas/mist/vapors/spray
    - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
    - Call a poison center/doctor if you feel unwell.
    - Store locked up.
    - Dispose of contents/container in accordance with local/regional/national/international regulations.
  - **Chemical safety assessment**: A Chemical Safety Assessment has not been carried out.
Safety Data Sheet
acc. to OSHA HCS 29 CFR 1910.1200

Printing date 02/24/2015 Reviewed on 02/24/2015 Version US-EN-Rev 1

Trade name: EXAFLEX PUTTY (Base)

(Contd. of page 8)

16 Other information

- **Department issuing MSDS:** Regulatory Affairs
- **Contact:**
  Regulatory Affairs
  Telephone No. +1 (708) 597-0900
  sds@gcamerica.com
- **Date of preparation / last revision** 02/24/2015 / -
- **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 (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways)
  - ECHA: European Chemicals Agency
  - OSHA: Occupational Safety and Health Administration (USA)
  - 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
  - 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
  - Acute Tox. 4: Acute toxicity, Hazard Category 4
  - Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
  - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- **Sources**
  - Manufacturers’ MSDS/SDSs
  - 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.

- **Disclaimer:**
  The information contained herein is believed to be true and accurate. However, all statements, recommendations or suggestions are made without any guarantee, representation or warranty, express or implied, on our part. Therefore, no warranty is made or to be implied that the information set out in this document is accurate or complete, and we accordingly exclude all liability in connection with the use of this information or the products referred to herein. All such risks are assumed by the purchaser/user. The information contained herein is also subject to change without notice. For the avoidance of doubt, however, nothing in this document excludes or limits our liability for death or personal injury caused by our negligence or for fraudulent misrepresentation.
1 Identification

- **Product identifier**
- **Trade name**: EXAFLEX PUTTY (Catalyst)

- **Relevant identified uses of the substance or mixture and uses advised against**
  - Dental material
  - The product is intended for professional use.
  - To avoid risks for humans and environment obtain instructions.

- **Application of the substance / the mixture**
  - Dental impression material

- **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(s) identification

- **Classification of the substance or mixture**
  - Acute Tox. 4 H332 Harmful if inhaled.
  - STOT SE 3 H335 May cause respiratory irritation.
  - Eye Irrit. 2B H320 Causes eye irritation.

- **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 statements**
  - Harmful if inhaled.
  - Causes eye irritation.
  - May cause respiratory irritation.
40.1.1 Precautionary statements
Avoid breathing dust/fume/gas/mist/vapors/spray
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a poison center/doctor if you feel unwell.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

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

Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients
- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

<table>
<thead>
<tr>
<th>Number</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>112926-00-8</td>
<td>silicon dioxide, amorphous</td>
<td>60-80%</td>
</tr>
<tr>
<td></td>
<td>catalyst**</td>
<td>5-10%</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 or oxygen; call for doctor.
    - In case of unconsciousness place patient stably in side position for transportation.
    - Do not use mouth to mouth or mouth to nose resuscitation.
  - After skin contact:
    - Rinse with warm water.
    - If symptoms persist consult doctor.
40.1.1 — After eye contact:
Protect unharmed eye.
Rinse opened eye for several minutes under running water. Then 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
  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.
    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
  Formation of toxic gases is possible during heating or in case of fire.

· 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.
Trade name: EXAFLEX PUTTY (Catalyst)

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
Do not inhale dust / smoke / mist.
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.

· **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.
  · **Further information about storage conditions:**
    Observe instructions for use / storage.
  · **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>Component</th>
<th>Long-term value</th>
<th>Permissible exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>112926-00-8 silicon dioxide, amorphous</td>
<td>2 mg/m³</td>
<td>PEL 20mppcf or 80mg/m³/%SiO₂; 1mppcf = 0.1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>6 mg/m³</td>
<td>REL See Pocket Guide App. C</td>
</tr>
<tr>
<td></td>
<td>1* 0.002 mg/m³</td>
<td>TLV catalyst Withdrawn</td>
</tr>
<tr>
<td></td>
<td>1* 0.002 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1* 0.002 mg/m³</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.
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
    - Appearance:
      - Form: Pasty
      - Color: Blue
      - Odor: Odorless
      - Odor threshold: Not determined.
      - pH-value: Not applicable.
    - Change in condition
      - Melting point/Melting range: Undetermined.
      - Boiling point/Boiling range: 160 °C (320 °F)
    - Flash point: Not applicable.
    - Flammability (solid, gaseous): Not determined.
    - Ignition temperature: Undetermined.
    - Decomposition temperature: Not determined.
    - Auto igniting: Product is not selfigniting.
  - Danger of explosion: Product does not present an explosion hazard.
  - Explosion limits:
    - Lower: Not determined.
    - Upper: Not determined.
  - Vapor pressure: Not applicable.
  - Density at 20 °C (68 °F): 1.67 g/cm³ (13.936 lbs/gal)
  - Relative density: Not determined.
  - Vapour 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:
    - Organic solvents: 0.0 %
  - Solids content: 100.0 %

(Contd. on page 6)
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: No further relevant information available.
- 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: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
  The product shows the following dangers according to internally approved calculation methods for preparations:
  Irritant

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    | Substance                        | Category |
    |---------------------------------|----------|
    | silicon dioxide, amorphous      | 3        |
    | cobalt aluminate blue spinel    | 2B       |
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    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.
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.
- **Additional ecological information**:
  - **General notes**:
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - **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**:
    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, ADN, IMDG, IATA Void
- **UN proper shipping name**
  - DOT, ADR, ADN, IMDG, IATA Void
- **Transport hazard class(es)**
  - DOT, ADR, ADN, IMDG, IATA Void
- **Packing group**
  - DOT, ADR, 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.
Trade name: EXAFLEX PUTTY (Catalyst)

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 ingredient is listed.
  · Section 313 (Specific toxic chemical listings):
    None of the ingredients is listed.
· TSCA (Toxic Substances Control Act):
  vinyl dimethylpolysiloxane
  catalyst**
· Carcinogenic categories
  · EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  · TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  · NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.
· GHS label elements
  The product is classified and labeled according to the Globally Harmonized System (GHS).
· Hazard pictograms
  GHS07
· Signal word Warning
· Hazard statements
  Harmful if inhaled.
  Causes eye irritation.
  May cause respiratory irritation.
· Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
  Call a poison center/doctor if you feel unwell.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
Trade name: EXAFLEX PUTTY (Catalyst)

16 Other information

- **Department issuing MSDS:** Regulatory Affairs
- **Contact:**
  Regulatory Affairs
  Telephone No. +1 (708) 597-0900
  sds@gcamerica.com
- **Date of preparation / last revision:** 02/24/2015 / -
- **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 (European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways)
  - ECHA: European Chemicals Agency
  - OSHA: Occupational Safety and Health Administration (USA)
  - 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
  - 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
  - Acute Tox. 4: Acute toxicity, Hazard Category 4
  - Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B
  - STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

- **Sources**
  - Manufacturers' MSDS/SDSs
  - 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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