1.1 Product identifier
Product Name: High Temperature Silicone (Red)
Product Code(s): HTS100
Synonym(s): Silicone Sealant
REACH Registration Number: No data available

1.2 Relevant identified uses of the substance or mixture and uses advised against
General use: General purpose sealant and adhesive
Uses advised against: None known

1.3 Details of the supplier and of the safety data sheet
Manufacturer/Distributor
Everkem Diversified Products
5180 Indiana Avenue
Winston-Salem, NC 27106 USA
+1-800-638-3160

1.4 Emergency telephone number: +1-800-638-3160

2.1 Classification of substance or mixture
Product definition: Mixture
Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation (EC) No 1272/2008
Not a dangerous substance according to OSHA or to European Union Legislation

2.2 Label Elements
Not a dangerous substance according to GHS

3.1 Substances
Not applicable

3.2 Mixtures

<table>
<thead>
<tr>
<th>% by Weight</th>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>Index Number</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0 - 10.0</td>
<td>Silicon Dioxide, Amorphous</td>
<td>7631-86-9</td>
<td>265-148-2</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>5.0 - 10.0</td>
<td>Distillates (Petroleum), Hydrotreated Middle</td>
<td>64742-46-7</td>
<td>265-148-2</td>
<td>649-221-00-X</td>
<td>H304</td>
</tr>
<tr>
<td>1.0 - 5.0</td>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>236-675-5</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1.0 - 5.0</td>
<td>Aluminum Oxide</td>
<td>1344-28-1</td>
<td>215-691-6</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1.0 - 5.0</td>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>215-609-9</td>
<td>--------------</td>
<td>--------------</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4.1 Description of first aid measures
Inhalation: If product vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention.

Eyes: Do not rub eyes. Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin: Remove contaminated clothing. Quickly and gently remove excess product with a dry cloth or paper towel. Flush skin with lukewarm water for 15 minutes. Wash affected area with soap and water. Clean contaminated clothing and shoes before reuse. If irritation persists, seek medical advice.

Ingestion: Rinse mouth with water if the victim is conscious. Remove dentures, if present. DO NOT induce vomiting unless directed to do so by medical personnel. If vomiting occurs naturally, have the victim lean forward to reduce the risk of aspiration of material into the lungs. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Get medical attention immediately.
4.2 Most important symptoms and effects, both acute and delayed
Potential health symptoms and effects
- **Eyes:** Causes eye irritation. Symptoms include redness, itching, swelling, tearing and pain.
- **Skin:** Causes skin irritation. Symptoms may include localized redness and itching.
- **Inhalation:** May cause irritation of the mouth, throat and gastrointestinal tract with nausea, abdominal pain, vomiting and diarrhea.
- **Chronic:** Persons with pre-existing skin disorders or respiratory impairment may be more susceptible to the effects of this material. Silicon Dioxide (as dust) and Titanium Dioxide are suspected animal carcinogens. Carbon Black is a potential human carcinogen (as dust). Refer to Section 11.2.

4.3 Indication of any immediate medical attention and special treatment needed
Advice to Doctor and Hospital Personnel
Treat symptomatically and supportively.

### SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media
- **Suitable methods of extinction:** Use extinguishing media such as water fog or water spray, dry chemical, carbon dioxide and foam.
- **Unsuitable methods of extinction:** None known

5.2 Special hazards arising from the substance or mixture
- **Closed containers may explode due to the buildup of pressure when exposed to extreme heat.** During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

This product can generate trace quantities of formaldehyde when heated to temperatures greater than 150 °C (300 °F). Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant and potential cancer hazard. This product releases acetic acid when wet.

**Explosion hazards:** Material does not present an explosion hazard.

5.3 Advice for firefighters
Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control runoff water to prevent environmental contamination. Fire residues and contaminated extinguishing water must be disposed of in accordance with local regulations.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
- Evacuate non-essential personnel. Remove all sources of ignition. Ventilate the area. Wear appropriate protective clothing and equipment designated in Section 8. Spilled material creates a slip hazard.

6.2 Environmental precautions
- Avoid dispersal of spilled material and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up
- Approach spill from upwind direction. Cover drains and contain spill. Cover spill with non-combustible absorbent. Wipe or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled material, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items used in the cleanup of releases. Place material to be discarded into an approved container for proper disposal. Observe possible material restrictions (refer to Sections 7.2 and 10.5). Dispose of in accordance with national, state and local regulations.

6.4 Reference to other sections
For indications about waste treatment, see Section 13.

### SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling
- Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Do not get in eyes or on skin or clothing. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear appropriate respiratory protection.

Use only outdoors or in a well-ventilated area. The product generates acetic acid when exposed to water or humid air. Provide ventilation during use to control acetic acid vapors within exposure guidelines or use respiratory protection. Avoid contact with eyes and skin. Avoid breathing vapor.

**Advice on protection against fire and explosion**
- Product does not present a fire or explosion hazard.

7.2 Conditions for safe storage, including any incompatibilities
- Keep containers tightly closed in cool, dry, well-ventilated storage areas. Transfer only to approved containers having correct labeling. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not reuse empty containers as they may retain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

7.3 Specific end uses
- Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.
## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Ingredient</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>7631-86-9</td>
<td>Silicon Dioxide, Amorphous</td>
<td>80 mg/m³ TWA (final rule)*</td>
<td>-----------</td>
<td>10 ppm, 6 mg/m³ TWA*</td>
</tr>
<tr>
<td>13463-67-7</td>
<td>Titanium Dioxide</td>
<td>10 mg/m³ (total dust)*</td>
<td>10 ppm (as dust)</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 mg/m³ (respirable fraction)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1344-28-1</td>
<td>Aluminum Oxide</td>
<td>5 mg/m³ TWA, respirable fraction*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 mg/m³ TWA, total dust*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Related to particles; otherwise not regulated

Acetic Acid (CAS #64-19-7) is formed when this product contacts water or humid air. Provide adequate ventilation to control exposures within the guidelines of OSHA PEL (10 ppm TWA) and ACGI TLV (10 ppm TWA; 15 ppm STEL).

### 8.2 Exposure controls

**Engineering Measures**: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to section 7.1.

**Individual protection measures**: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

**Hygiene measures**: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

**Eye/face protection**: Wear protective goggles or safety glasses with unperforated side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166. It is recommended that contact lenses be removed before using this sealant. Do not handle lenses until all sealant has been cleaned from the fingertips, nails and cuticles. Residual sealant may remain on fingers for several days and transfer to lenses, causing severe eye irritation.

**Hand Protection**: Wear Nitrile rubber or Neoprene gloves or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

**Other protective equipment**: Long sleeve shirts and trousers without cuffs; boots if the situation calls for them.

**Respiratory Protection**: None needed under ambient conditions with adequate local exhaust. Always use an approved respirator when vapors are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-faced supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environmental exposure controls**: Do not empty into drains.

PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

---

### 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>Appearance</td>
<td>Black paste</td>
</tr>
<tr>
<td>Odor</td>
<td>Acetic acid odor</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>2 ppm (Acetic acid)</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing/Melting Point, Range</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial Boiling Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;100 °C (&gt;212 °F), closed cup</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower Explosive Limit (LEL)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper Explosive Limit (UEL)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.007</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Negligible</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition Coefficient: n-octanol/water</td>
<td>Not determined</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

---
**SECTION 10 - STABILITY AND REACTIVITY**

10.1 Reactivity
No special reactivity has been reported.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Acetic acid is formed upon contact with water or humid air. Hazardous polymerization does not occur.

10.4 Conditions to avoid
Temperature extremes, incompatible materials, moisture

10.5 Incompatible materials
Oxidizing agents

10.6 Hazardous decomposition products
Thermal decomposition products include carbon oxides, silicon oxides, metal oxides, formaldehyde.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects

Acute Oral Toxicity
Expected to have low acute oral toxicity

Acute inhalation toxicity
Expected to have low acute inhalation toxicity

Acute dermal toxicity
Expected to have low acute dermal toxicity

Skin irritation
Causes skin irritation

Eye irritation
Causes eye irritation

Sensitization
No data available

Genotoxicity in vitro
No data available

Mutagenicity
No data available

Specific organ toxicity - single exposure
No data available

Specific organ toxicity - repeated exposure
No data available

Aspiration hazard
No data available

11.2 Further information
Silicon Dioxide (CAS #7631-86-9): IARC Group 3 Carcinogen - Not classifiable as to its carcinogenicity to humans. Not listed as a carcinogen by ACGIH, NTP or OSHA.

Titanium Dioxide: IARC Group 2B Carcinogen - Possibly carcinogenic to humans. Not listed as a carcinogen by ACGIH, OSHA or NTP. The IARC summary concluded, “No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium is bound to other materials such as paint”.

Carbon Black: IARC Group 2B Carcinogen - Possibly carcinogenic to humans; ACGIH A4 Carcinogen - Not classifiable as a human carcinogen. Not listed as a carcinogen by OSHA or NTP.

No data is available regarding the mutagenicity or teratogenicity of this product nor is there available data that indicates that it causes adverse developmental or fertility effects.

Handle in accordance with good industrial hygiene and safety practice.

**SECTION 12 - ECOLOGICAL INFORMATION**

12.1 Toxicity
Complete ecotoxicity data for this product is not yet available.

12.2 Persistence and degradability
Organic materials in this product are expected to biodegrade over time.

12.3 Bioaccumulation potential
Not expected to bioaccumulate
12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
No data available

12.6 Other adverse effects
Additional ecological information
Do not allow material to run into surface waters, wastewater or soil.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
The generation of waste should be avoided or minimized whenever possible. Although this product is classified as non-hazardous under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261 this material and its container should be disposed of in a safe way as empty containers may contain product residue. Leave chemicals in original containers. No mixing with other waste. Handle unclean containers like the product itself. Incinerate in an approved facility. Do not incinerate closed container. Dispose of in accordance with the Directive 2008/98/EC as well as other national, federal, state/provincial and local laws and regulations.

RCRA P-Series: No listing
RCRA U-Series: No listing

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

NOT REGULATED FOR TRANSPORT

SECTION 15 - REGULATORY INFORMATION

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

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.

Toxic Substance Control Act (TSCA) Inventory: All components of this product are listed or exempt from listing on the TSCA Inventory. This product is not subject to TSCA 12(b) Export Notification.

Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.4(f)(2) and Chemical Code Number None listed

Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number None listed

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals
None listed

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Acute Health Hazard

SARA 313 Information: Aluminum Oxide (CAS #1344-28-1) is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: None of the components of the product are subject to the reporting requirements of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: None of the components of the product are subject to the reporting requirements of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): None of the components of the product exceed the reporting threshold (de minimis) established under CERCLA.

Clean Air Act (CAA)
This product does not contain any substances listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).
This product does not contain any Class 1 Ozone depleters.
This product does not contain any Class 2 Ozone depleters.

Clean Water Act (CWA)
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
Distillates (Petroleum) Hydrotreated Middle (CAS #64742-46-7) is classified as an oil under Section 311 of the CWA and the Oil Pollution Act (OPA) of 1990.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
Petroleum-based chemicals in this product may contain trace amounts of materials known to the State of California to cause cancer or reproductive harm.

Other U.S. State Inventories
Silicon Dioxide (CAS #7631-86-9) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, MA, MN, NJ, PA.
Aluminum Oxide (CAS #1344-28-1) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: DE, ME, MA, MN, NJ, PA, RI, WA.

Titanium Dioxide (CAS #113463-67-7) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: IL, MA, MN, NJ, PA, RI.

Canada

**WHMIS Hazard Symbol and Classification:** No data available

**Canadian National Pollutant Release Inventory (NPRI):** None of the chemicals in this material are listed on the NPRI.

**European Economic Community**

WGK, Germany (Water danger/protection): 2

### 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

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**SECTION 16 - OTHER INFORMATION**

<table>
<thead>
<tr>
<th>Hazardous Material Information System (HMIS)</th>
<th>National Fire Protection Association (NFPA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Flammability</td>
</tr>
<tr>
<td>[Image: [Image 451x526 to 501x576]]</td>
<td>[Image: [Image 451x526 to 501x576]]</td>
</tr>
<tr>
<td>Health</td>
<td>Flammability</td>
</tr>
<tr>
<td>[Image: [Image 451x526 to 501x576]]</td>
<td>[Image: [Image 451x526 to 501x576]]</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>Instability</td>
</tr>
<tr>
<td>[Image: [Image 451x526 to 501x576]]</td>
<td>[Image: [Image 451x526 to 501x576]]</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>Special</td>
</tr>
<tr>
<td>[Image: [Image 451x526 to 501x576]]</td>
<td>[Image: [Image 451x526 to 501x576]]</td>
</tr>
</tbody>
</table>

**HMIS Hazard Rating Legend**

0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe  * = Chronic Health Hazard

**NFPA Hazard Rating Legend**

0 = Insignificant  1 = Slight  2 = Moderate  3 = High  4 = Extreme

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**Full text of GHS Hazard Phrases listed in Section 3 (not covered in Section 2)**

H304 - May be fatal if swallowed and enters the airways

**Abbreviation Key**

ACGIH  American Conference of Governmental Industrial Hygienists
ADR  Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)
CAS  Chemical Abstract Services
CFR  Code of Federal Regulations
DOT  Department of Transportation
DIS  Dangerous Goods by Rail
EMS Guide  Emergency Response Procedures for Ships Carrying Dangerous Goods
ERG  Emergency Response Guide Book
FDA  Food and Drug Administration
GHS  Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
HCS  Hazard Communication Standard
IARC  International Agency for Research on Cancer
IATA  International Air Transport Association half maximal
ICAO  International Civil Aviation Organization
IDLH  Immediately Dangerous to Life and Health
IMDG  International Maritime Dangerous Goods
IMO  International Maritime Organization
mppcf  Millions of Particles Per Cubic Foot
NA  North America
NIOSH  National Institute for Occupational Safety
NTP  National Toxicology Program
OSHA  Occupational Safety and Health Administration
PBT  Persistent, Bioaccumulating and Toxic
PEL  Permissible exposure limit
PMCC  Pensky-Martens Closed Cup
ppm  Parts Per Million
RCRA  Resource Conservation and Recovery Act
RID  Dangerous Goods by Rail
RQ  Reportable Quantity
TCC/Tag  Tagliabue Closed Cup
TLV  Threshold Limit Value
TSCA  Toxic Substance Control Act
TWA  Time-weighted Average
UN  United Nations
VOC  Volatile Organic Compounds
vPvB  Very Persistent and Very Bioaccumulating
WHMIS  Workplace Hazardous Materials Information System
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Revision date: 22 November 2016, Version 3
Preparation Date: 24 January 2011, Version 1