1. IDENTIFICATION

Product Name: 16C BLACK RTV SILICONE ADHESIVE SEALANT 11 OZ

Product Code: 81173

Recommended Use: Sealant

Uses advised against: No information available

Company Phone Number: 1-87-Permatex
(877) 376-2839

24 Hour Emergency Phone Number: Chem-Tel: 800-255-3924
International Emergency: 00+1+ 813-248-0585

Contract Number: MIS0003453

E-mail address: mail@permatex.com

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Warning
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing cancer
Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
Harmful to aquatic life with long lasting effects
Unknown acute toxicity
29.274% of the mixture consists of ingredient(s) of unknown toxicity

<table>
<thead>
<tr>
<th>substance(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
</tr>
<tr>
<td>POLY (DIMETHYLSILOXANE), HYDROXY TERMINATED</td>
</tr>
<tr>
<td>LIMESTONE</td>
</tr>
<tr>
<td>CALCIUM CARBONATE</td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED LIGHT</td>
</tr>
<tr>
<td>VINYL OXIMINOSILANE</td>
</tr>
<tr>
<td>CARBON BLACK</td>
</tr>
<tr>
<td>STEARIC ACID</td>
</tr>
<tr>
<td>2-BUTANONE OXIME</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.
4. FIRST AID MEASURES

Description of first aid measures

General advice
Get medical advice/attention if you feel unwell.

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact
IF ON SKIN: Wash with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Ingestion
IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms
See section 2 for more information.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide (CO2), Dry chemical, Foam

Unsuitable extinguishing media
None.

Specific hazards arising from the chemical
None in particular.

Explosion data
Sensitivity to Mechanical Impact
None.
Sensitivity to Static Discharge
None.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

Environmental precautions

Environmental precautions
Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up
**Methods for containment**
Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up**
Ensure adequate ventilation. Flood with water to complete polymerization and scrape off floor. Sweep up and shovel into suitable containers for disposal. Slippery, can cause falls if walked on.

**Prevention of secondary hazards**
Clean contaminated objects and areas thoroughly observing environmental regulations.

---

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**
Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**
Keep container tightly closed in a dry and well-ventilated place. Protect from moisture.

**Incompatible materials**
Strong oxidizing agents, Acids, Water

---

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIMESTONE 1317-65-3</td>
<td>-</td>
<td>TWA: 15 mg/m$^3$ total dust</td>
<td>TWA: 10 mg/m$^3$ total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 5 mg/m$^3$ respirable fraction (vacated)</td>
<td>TWA: 5 mg/m$^3$ respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 15 mg/m$^3$ total dust</td>
<td>TWA: 15 mg/m$^3$ total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated)</td>
<td>TWA: 5 mg/m$^3$ respirable fraction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA: 5 mg/m$^3$ respirable fraction</td>
</tr>
<tr>
<td>CALCIUM CARBONATE 471-34-1</td>
<td>-</td>
<td>-</td>
<td>TWA: 10 mg/m$^3$ total dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA: 5 mg/m$^3$ respirable dust</td>
</tr>
<tr>
<td>CARBON BLACK 1333-86-4</td>
<td>TWA: 3 mg/m$^3$ inhalable fraction</td>
<td>TWA: 3.5 mg/m$^3$ (vacated)</td>
<td>TWA: 0.1 mg/m$^3$ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 3.5 mg/m$^3$ (vacated)</td>
<td>TWA: 3.5 mg/m$^3$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IDLH: 1750 mg/m$^3$</td>
</tr>
</tbody>
</table>

**NIOSH IDLH** Immediately Dangerous to Life or Health

**Other Information**
Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls**
Showers
Eyewash stations
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**
Wear safety glasses with side shields (or goggles).

**Skin and body protection**
Wear protective gloves and protective clothing.

**Respiratory protection**
Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.
General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Paste</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Property</strong></td>
<td><strong>Values</strong></td>
<td><strong>Remarks • Method</strong></td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 93 °C / &gt; 200 °F</td>
<td>Tag Closed Cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt;5 mm Hg</td>
<td>Air = 1</td>
</tr>
<tr>
<td>Vapor density</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.43</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Not applicable</td>
<td>Polymerization</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td><strong>Other Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>3.2%, 45.87 g/l</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

#### Reactivity

No data available

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of Hazardous Reactions

None under normal processing.

#### Conditions to avoid

Excessive heat.

#### Incompatible materials

Strong oxidizing agents, Acids, Water
Hazardous Decomposition Products
Carbon oxides
Nitrogen oxides (NOx)
Formaldehyde
May release 2-butanone oxime (ethyl methyl ketoxime) at elevated temperature

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

**Inhalation**
May cause irritation of respiratory tract.

**Eye contact**
Contact with eyes may cause irritation. May cause redness and tearing of the eyes.

**Skin contact**
May cause skin irritation and/or dermatitis. May cause sensitization by skin contact.

**Ingestion**
Ingestion may cause irritation to mucous membranes.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLY (DIMETHYLSILOXANE), HYDROXY TERMINATED</td>
<td>&gt; 16 mL/kg (Rabbit)</td>
<td>&gt; 8750 mg/m³ (Rat) 7 h</td>
<td></td>
</tr>
<tr>
<td>CALCIUM CARBONATE 471-34-1</td>
<td>&gt; 6450 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED LIGHT 64742-47-8</td>
<td>&gt; 5000 mg/kg (Rat)</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
<td>&gt; 5.2 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>CARBON BLACK 1333-86-4</td>
<td>&gt; 15400 mg/kg (Rat)</td>
<td>&gt; 3 g/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>STEARIC ACID 57-11-4</td>
<td>-</td>
<td>&gt; 5 g/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>2-BUTANONE OXIME 96-29-7</td>
<td>&gt; 930 mg/kg (Rat)</td>
<td>= 0.2 mg/kg (Rabbit)</td>
<td>= 20 mg/L (Rat) 4 h</td>
</tr>
</tbody>
</table>

Information on toxicological effects

**Symptoms**
No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**
No information available.

**Germ cell mutagenicity**
No information available.

**Carcinogenicity**
The table below indicates whether each agency has listed any ingredient as a carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK 1333-86-4</td>
<td>A3</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

**ACGIH (American Conference of Governmental Industrial Hygienists)**
A3 - Animal Carcinogen

**IARC (International Agency for Research on Cancer)**
Group 2B - Possibly Carcinogenic to Humans

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**
X - Present

**Target Organ Effects**
Eyes, Lymphatic System, Respiratory system, Skin.

The following values are calculated based on chapter 3.1 of the GHS document:

- ATEmix (oral) 14090 mg/kg
- ATEmix (dermal) 9616 mg/kg

12. ECOLOGICAL INFORMATION

**Ecotoxicity**
95.074% of the mixture consists of components(s) of unknown hazards to the aquatic environment
### Chemical Name

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISTILLATES (PETROLEUM), HYDROTREATED LIGHT 64742-47-8</td>
<td>-</td>
<td>45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static 2.4: 96 h Oncorhynchus mykiss mg/L LC50 static</td>
<td>4720: 96 h Den-dronereides heteropoda mg/L LC50</td>
</tr>
<tr>
<td>CARBON BLACK 1333-86-4</td>
<td>-</td>
<td>-</td>
<td>5600: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>2-BUTANONE OXIME 96-29-7</td>
<td>83: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>777 - 914: 96 h Pimephales promelas mg/L LC50 flow-through 320 - 1000: 96 h Leuciscus idus mg/L LC50 static 760: 96 h Poecilia reticulata mg/L LC50 static</td>
<td>750: 48 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

**Mobility**
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-BUTANONE OXIME 96-29-7</td>
<td>0.65</td>
</tr>
</tbody>
</table>

**Other adverse effects**
No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**
Do not reuse container.

**US EPA Waste Number**
Not applicable

### 14. TRANSPORT INFORMATION

**DOT**
Proper shipping name: Not regulated

**IATA**
Proper shipping name: Not regulated

**IMDG**
Proper shipping name: Not regulated

### 15. REGULATORY INFORMATION

**International Inventories**

- **TSCA**
  Complies

- **DSL/NDSL**
  Complies
EINECS/ELINCS: Not Listed
ENCS: Not Listed
IECSC: Complies
KECL: Complies
PICCS: Complies
AICS: Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
- Acute health hazard: Yes
- Chronic Health Hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARBON BLACK - 1333-86-4</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>SILICA, QUARTZ - 14808-60-7</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIMESTONE 1317-65-3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CARBON BLACK 1333-86-4</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SILICA, QUARTZ 14808-60-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information
EPA Pesticide Registration Number: Not applicable
81173 - 16C BLACK RTV SILICONE ADHESIVE SEALANT 11 OZ

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)

Revision Date 01-Apr-2015

Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet