Permatex® Ultra Copper® High Temp Sensor Safe
82751

I. PRODUCT IDENTIFICATION

Product Name: Permatex® Ultra Copper® High Temp Sensor Safe
RTV Gasket 101C Canada
Item No.: 82751
Part No.: 101C
Product Use: Adhesive/Sealant
Formula No.: Not Applicable

II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>% by Weight</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(dimethylsiloxane), hydroxy terminated</td>
<td>55-60</td>
<td>70131-67-8</td>
</tr>
<tr>
<td>Poly(dimethylsiloxane), dimethyl</td>
<td>20-25</td>
<td>63148-62-9</td>
</tr>
<tr>
<td>Modified silicon dioxide</td>
<td>5-10</td>
<td>68611-44-9</td>
</tr>
<tr>
<td>Vinyl oximinosilane</td>
<td>5-10</td>
<td>2224-33-1</td>
</tr>
<tr>
<td>IRON OXIDE</td>
<td>1-3</td>
<td>1309-37-1</td>
</tr>
<tr>
<td>SILICA, MICA</td>
<td>1-3</td>
<td>12001-26-2</td>
</tr>
<tr>
<td>Ureidopropyltrimethoxysilane</td>
<td>1-3</td>
<td>23843-64-3</td>
</tr>
<tr>
<td>Methyl ethyl ketoxime</td>
<td>***</td>
<td>96-29-7</td>
</tr>
</tbody>
</table>

***When this product is exposed to moisture, 5-10% methylethylketoxime may be formed.

III. PHYSICAL DATA

Physical
State/Appearance: Copper paste
Odour & Odour Threshold: Mild
Specific Gravity: 1.05
Vapour Pressure: Less than 5mm at 70°F
Vapour Density: 3.0
Evaporation Rate: Not Available
Boiling Point: Not Applicable, Polymeric
Freezing Point: Not Available
Volatile Organic Compound (EPA Method 24) 5.3%; 56 grams per liter
pH: 7-8
Coefficient of water/oil distribution: Not Available
IV. FIRE OR EXPLOSIVE HAZARD

Conditions of Flammability: None
Means of Extinction: Carbon Dioxide, Foam, Dry Chemical
Flashpoint (Method): Greater than 200°F Method: Tag Closed Cup
Upper Flammable Limit: Ferric oxide: 12.5%
Lower Flammable Limit: Ferric oxide: 2.6%
Auto-Ignition Temperature: Not Available
Hazardous Combustion Products: Formaldehyde, silica fume, oxides of carbon.
Explosion Data - Sensitivity to Static Discharge: Not Applicable

V. REACTIVITY DATA

Conditions causing Chemical Instability: None
Substances with which the Product is Unstable: Strong oxidizers. Polymerized by contact with moisture.
Conditions of Reactivity: None
Hazardous Decomposition Products: Methyl ethyl ketoxime

VI. TOXICOLOGICAL PRODUCTS

Route(s) of Entry: Skin or eye contact; inhalation; ingestion.
Existing Conditions Aggravated by Exposure: Mica: respiratory conditions.
Toxicity Information: (See Effects of Acute Exposure to Product)
Effects of Acute Exposure to Product: Eye and skin irritant. May be irritating by inhalation. Moderately toxic by ingestion. When heated to temperatures above 300°F (150°C) in the presence of air, this product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard and a known skin and respiratory sensitizer. Vapors irritate eyes, nose and throat. Safe handling conditions may be maintained by keeping vapor concentrations below the OSHA permissible limit for formaldehyde.

Effects of Chronic Exposure to Product:
VI. TOXICOLOGICAL PRODUCTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Literature Referenced</th>
<th>Target Organ and Other Health Effects</th>
<th>Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(dimethylsiloxane), hydroxy terminated</td>
<td>NTO</td>
<td>NO NO NO</td>
<td></td>
</tr>
<tr>
<td>Poly(dimethylsiloxane), dimethyl</td>
<td>IRR</td>
<td>NO NO NO</td>
<td></td>
</tr>
<tr>
<td>Modified silicon dioxide</td>
<td>NTO</td>
<td>NO NO NO</td>
<td></td>
</tr>
<tr>
<td>Vinyl oximinosilane</td>
<td>No Data</td>
<td>NO NO NO</td>
<td></td>
</tr>
<tr>
<td>IRON OXIDE</td>
<td>ALG CAR CNS IRR KID LIV LUN</td>
<td>NO N/A NO</td>
<td></td>
</tr>
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<td>SILICA, MICA</td>
<td>LUN</td>
<td>NO NO NO</td>
<td></td>
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<td>NO NO NO</td>
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Abbreviations

N/A Not Applicable
ALG Allergen
BLO Blood
CAR Cardiac
CNS Central nervous system
EYE Eyes
IRR Irritant
KID Kidney
LIV Liver
LUN Lung
NTO No Target Organs
SOM Some evidence of carcinogenicity

Exposure Limits (TWA) | ACGIH (TLV) | OSHA (PEL) | OTHER |
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<tr>
<td>Modified silicon dioxide</td>
<td>10 mg/m³ (Inhal) 20 mppcf</td>
<td>6 mg/m³</td>
<td></td>
</tr>
<tr>
<td>IRON OXIDE</td>
<td>5 mg/M³ (Fe) 10 mg/M³ (Fe) particulate</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>SILICA, MICA</td>
<td>3 mg/m³ TWA 20 mppcf</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Methyl ethyl ketoxime</td>
<td>None</td>
<td>None</td>
<td>3 ppm TWA 10 ppm STEL</td>
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Exposure Limits (STEL) | ACGIH (TLV) | OSHA (PEL) |
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Ingredients for which no Exposure Limits have been established are not listed above.

Irritancy of Product: Methyl ethyl ketoxime vapors produced during cure are toxic and irritates eyes, nose, and throat.

Sensitization to Product: (See Irritancy of Product)
VI. TOXICOLOGICAL PRODUCTS

Carcinogenicity: (See Effects of Chronic Exposure to Product)
Reproductive Toxicity: (See Effects of Chronic Exposure to Product)
Teratogenicity: (See Effects of Chronic Exposure to Product)
Mutagenicity: (See Effects of Chronic Exposure to Product)
Name of Toxicologically
Synergistic Products: Not Available
WHMIS Hazard Class: D.2.B

VII. PREVENTATIVE MEASURES

Personal Protection
Eyes: Safety glasses or goggles.
Skin: Rubber or plastic gloves.
Ventilation: Sufficient to maintain vapor concentration below TLV.
Engineering Controls: See "Ventilation" above
Spill or Leak Procedures: Wipe or scrape up spilled material. Maintain good ventilation for large spills. Place scrap material in a well ventilated place and allow to cure to rubber.
Waste Disposal: Cured rubber can be incinerated following Canadian and local regulations. Should be checked for cadmium concentration.

(VContact Loctite Canada's Customer Service at 905-814-6511 for Shelf Life Information)
Handling Procedures
and Equipment: Store in a dry area below 90°F.
Keep container closed when not in use.
Special Handling Information: Avoid skin or eye contact. Keep away from eyes. Avoid prolonged breathing of vapors.

VIII. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Keep individual calm.
Obtain medical attention.
Inhalation: Remove to fresh air. If symptoms persist, obtain medical attention.
Skin Contact: Wipe off paste with paper towel or cloth. Wash with soap and water.
Eye Contact: Flush at least 15 minutes with water. Obtain medical attention.
IX. SHIPPING INFORMATION

Canadian Transportation
of Dangerous Goods:

Shipping Name: NOT REGULATED
Classification: NOT REGULATED
Product ID Number: NONE

ICAO/IATA:

Proper Shipping Name: Unrestricted
Class or Division: Unrestricted
UN or ID Number: None

X. PREPARATION INFORMATION

Prepared By: Stephen Repetto
Title: Research Chemist, Environmental Health & Safety
Emergency Phone Number: (860) 571-5100
Revision Date: December 15, 2001 Revision: 0021