1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 3621 known as Loctite(R) 3621 Chipbonder(R)  
IDH number: 235130

Product type: One-part epoxy  
Item number: 30846

Restriction of Use: None identified  
Region: Canada

Company address:  
Henkel Electronic Materials LLC  
14000 Jamboree Road  
Irvine, CA 92606  
Contact information:  
Telephone: +1 (888) 943-6535  
MEDICAL EMERGENCY Phone: Poison Control Center  
1-877-671-4608 (toll free) or 1-303-592-1711  
TRANSPORT EMERGENCY Phone: CHEMTREC  
1-800-424-9300 (toll free) or 1-703-527-3887  
Internet: www.henkel.com/electronics

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING:  
CAUSES SKIN IRRITATION.  
MAY CAUSE AN ALLERGIC SKIN REACTION.  
CAUSES SERIOUS EYE IRRITATION.

HAZARD CLASS | HAZARD CATEGORY
--- | ---
SKIN IRRITATION | 2
EYE IRRITATION | 2A
SKIN SENSITIZATION | 1

PICTOGRAM(S)

Precautionary Statements

**Prevention:**  
Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling.  
Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, eye protection, and face protection.

**Response:**  
IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs; Get medical attention. If eye irritation persists; Get medical attention. Take off contaminated clothing.

**Storage:**  
Not prescribed

**Disposal:**  
Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

Classification complies with Canadian Hazardous Products Regulations (WHMIS 2015) and is consistent with the provision of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

IDH number: 235130  
Product name: LOCTITE 3621 known as Loctite(R) 3621 Chipbonder(R)
### 4. FIRST AID MEASURES

**Inhalation:**
Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.

**Skin contact:**
Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye contact:**
Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Ingestion:**
DO NOT induce vomiting unless directed to do so by medical personnel. Give a conscious person several glasses of water. Never give anything by mouth to an unconscious person. If symptoms develop and persist, get medical attention.

**Symptoms:**
See Section 11.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:**
Water spray (fog), foam, dry chemical or carbon dioxide.

**Special firefighting procedures:**
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.

**Unusual fire or explosion hazards:**
None

**Hazardous combustion products:**

### 6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:**
Do not allow product to enter sewer or waterways.

**Clean-up methods:**
Ensure adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Scrape up spilled material and place in a closed container for disposal. Flush area with water to remove trace residue.
7. HANDLING AND STORAGE

Handling: Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Do not breathe gas/fumes/vapor/spray. Keep container closed. Wash thoroughly after handling.

Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Bisphenol-F Epichlorohydrin resin</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4,4'-(1-Methylmethyldiene) bisphenol reaction products with (Chloromethyl) oxirane, 2-methyl-1H-imidazole, (phenoxymethyl) oxirane, p</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2,3-Epoxypropyl neodecanoate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Treated fumed silica</td>
<td>10 mg/m3 TWA Inhalable dust. 3 mg/m3 TWA Respirable fraction.</td>
<td>15 mg/m3 TWA Total dust. 5 mg/m3 TWA Respirable fraction.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering controls: Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection: Safety goggles or safety glasses with side shields.

Skin protection: Use impermeable gloves and protective clothing as necessary to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state:</td>
<td>Paste</td>
</tr>
<tr>
<td>Color:</td>
<td>Red</td>
</tr>
<tr>
<td>Odor:</td>
<td>Epoxy</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>&lt; 1.0 mm hg (20 °C (68°F))</td>
</tr>
<tr>
<td>Boiling point/range:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point/ range:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>0.95</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>0.95</td>
</tr>
<tr>
<td>Flash point:</td>
<td>200 °C (392°F) Closed cup</td>
</tr>
<tr>
<td>Flammable/Explosive limits - lower:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammable/Explosive limits - upper:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Autoignition temperature:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not available.</td>
</tr>
<tr>
<td>VOC content:</td>
<td>5.75 %; 54.67 g/l EPA Method 24</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Stability:</th>
<th>Stable at normal conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous reactions:</td>
<td>None under normal processing.</td>
</tr>
<tr>
<td>Incompatible materials:</td>
<td>Can react vigorously with strong oxidizing agents, strong Lewis or mineral acids, and strong mineral and organic bases, especially primary and secondary aliphatic amines. Reacts with considerable heat release with some curing agents. Mercaptans. Alkalis.</td>
</tr>
<tr>
<td>Reactivity:</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions to avoid:</td>
<td>Store away from incompatible materials. Heat, flames, sparks and other sources of ignition.</td>
</tr>
</tbody>
</table>

### 11. TOXICOLOGICAL INFORMATION

| Relevant routes of exposure: | Skin, Inhalation, Eyes, Ingestion |
Potential Health Effects/Symptoms

Inhalation: May cause respiratory tract irritation. Coughing. Sneezing.

Skin contact: Causes skin irritation. May cause allergic skin reaction. Repeated or prolonged contact can result in drying of skin. Redness. Rash.


Ingestion: May be harmful if swallowed.

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>LD50s and LC50s</th>
<th>Immediate and Delayed Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epichlorohydrin-4,4'-isopropylidene diphenol resin</td>
<td>None</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>Bisphenol-F Epichlorhydrin resin</td>
<td>None</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>4,4'-[1-Methyleneylidene] bisphenol reaction products with (Chloromethyl) oxirane, 2-methyl-1H-imidazole, (phenoxyethyl) oxirane, p</td>
<td>None</td>
<td>No Records</td>
</tr>
<tr>
<td>2,3-Epoxypropyl neodecanoate</td>
<td>None</td>
<td>Irritant, Allergen</td>
</tr>
<tr>
<td>Treated fumed silica</td>
<td>None</td>
<td>Irritant</td>
</tr>
<tr>
<td>Phenol polymer with formaldehyde, glycidyl ether</td>
<td>None</td>
<td>Allergen, Irritant</td>
</tr>
<tr>
<td>4,4'-Isopropylidenediphenol</td>
<td>Oral LD50 (Rat) = 4,100 mg/kg Oral LD50 (Rat) = 3,300 mg/kg Oral LD50 (Mouse) = 5,280 mg/kg Oral LD50 (Mouse) = 2,500 mg/kg Oral LD50 (Mouse) = 4,100 mg/kg</td>
<td>Allergen, Blood, Irritant, Kidney, Reproductive, Spleen</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

Canada Transportation of Dangerous Goods - Ground

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None
International Air Transportation (ICAO/IATA)
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Epoxy resin)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Exceptions: Up to 30 ml max per inner/primary package when shipped as originally packaged only

Water Transportation (IMO/IMDG)
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy resin)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Epoxy resin
Exceptions: Up to 30 ml max per inner/primary package when shipped as originally packaged only

15. REGULATORY INFORMATION

Canada Regulatory Information
CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

United States Regulatory Information
TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: New Safety Data Sheet format.

Prepared by: Victoria Rafferty Maloney, Regulatory Affairs Specialist
Issue date: 04/21/2017

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