1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE 5117 THREAD SEALANT known as LOCTITE® PIPE JOINT COMPOUND 1
IDH number: 1534294

Product type: Sealant
Item number: 1534294
Region: United States

Restriction of Use: None identified

Company address: Henkel AG & Co. KGaA
Henkelstr. 67
Düsseldorf 40589

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: FLAMMABLE LIQUID AND VAPOR.
CAUSES SKIN IRRITATION.
MAY CAUSE AN ALLERGIC SKIN REACTION.
CAUSES SERIOUS EYE IRRITATION.
MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.

HAZARD CLASS | HAZARD CATEGORY
--- | ---
FLAMMABLE LIQUID | 3
SKIN IRRITATION | 2
EYE IRRITATION | 2A
RESPIRATORY SENSITIZATION | 1
SKIN SENSITIZATION | 1

PICTOGRAM(S)

Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. 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. In case of inadequate ventilation wear respiratory protection.

Response: If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. If experiencing respiratory symptoms: Call a poison center or physician. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep cool.
Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

See Section 11 for additional toxicological information.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Component(s)</th>
<th>CAS Number</th>
<th>Percentage*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaolin</td>
<td>1332-58-7</td>
<td>30 - 40</td>
</tr>
<tr>
<td>Castor oil, oxidized</td>
<td>68187-84-8</td>
<td>20 - 30</td>
</tr>
<tr>
<td>Rosin</td>
<td>8050-09-7</td>
<td>10 - 20</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>67-63-0</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

### 4. FIRST AID MEASURES

**Inhalation:**
Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Skin contact:**
Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse.

**Eye contact:**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

**Ingestion:**
DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. 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.

**Unusual fire or explosion hazards:**
Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers. In case of fire, keep containers cool with water spray.

**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: Remove all sources of ignition. Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

Handling: Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Use only with adequate ventilation. Refer to Section 8.

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>Kaolin</td>
<td>2 mg/m³ TWA Respirable fraction. 2 mg/m³ TWA Respirable fraction. 15 mg/m³ PEL Total dust.</td>
<td>5 mg/m³ PEL Respirable fraction. 15 mg/m³ PEL Total dust.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Castor oil, oxidized</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Rosin</td>
<td>Exposure by all routes should be carefully controlled to levels as low as possible. Included in the regulation but with no data values. See regulation for further details (Respiratory sensitization) (Dermal sensitization)</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2-Propanol</td>
<td>200 ppm TWA 400 ppm STEL</td>
<td>400 ppm (980 mg/m³) PEL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Talc</td>
<td>2 mg/m³ TWA Respirable fraction. 2 mg/m³ TWA Respirable fraction. 0.1 mg/m³ TWA Respirable. 0.3 mg/m³ TWA Total dust.</td>
<td>2.4 MPPCF TWA Respirable. 0.1 mg/m³ TWA Respirable. 0.05 mg/m³ PEL</td>
<td>None</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Titanium dioxide</td>
<td>10 mg/m³ TWA</td>
<td>15 mg/m³ PEL Total dust.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Carbon black</td>
<td>3 mg/m³ TWA Inhalable fraction.</td>
<td>3.5 mg/m³ PEL</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>0.025 mg/m³ TWA Respirable fraction. 0.025 mg/m³ TWA Respirable fraction.</td>
<td>2.4 MPPCF TWA Respirable. 0.1 mg/m³ TWA Respirable. 0.05 mg/m³ PEL</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering controls: Provide adequate local exhaust ventilation to maintain worker exposure below 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. Full face protection should be used if the potential for splashing or spraying of product exists. Safety showers and eye wash stations should be available.

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

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid, viscous</td>
</tr>
<tr>
<td>Color</td>
<td>Brown, dark</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcoholic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>33 mm hg</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>180°F (82.2°C)</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.37</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Flash point</td>
<td>24°C (75.2°F)</td>
</tr>
<tr>
<td>Flammable/Explosive limits - lower</td>
<td>2.3%</td>
</tr>
<tr>
<td>Flammable/Explosive limits - upper</td>
<td>12.7%</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>398.3°C (748.94°F)</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Partially soluble</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not determined</td>
</tr>
<tr>
<td>VOC content</td>
<td>15.2% EPA Method 24</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: None under normal processing.


Incompatible materials: Strong oxidizing agents. Flammable materials.

Reactivity: Not available.

Conditions to avoid: Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.

### 11. TOXICOLOGICAL INFORMATION

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

Inhalation: Inhalation of vapors or mists of the product may be irritating to the respiratory system. May cause allergic respiratory reaction. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed (up to several hours after exposure).

Skin contact: Causes skin irritation. May cause allergic skin reaction.

Eye contact: Causes serious eye irritation.

Ingestion: May cause irritation to the gastrointestinal tract, mouth and mucous membranes.

### Hazardous Component(s) | LD50s and LC50s | Immediate and Delayed Health Effects
--- | --- | ---
Kaolin | Oral LD50 (Rat) = > 5,000 mg/kg  
Dermal LD50 (Rat) = > 5,000 mg/kg | Nuisance dust
Castor oil, oxidized | None | No Records
Rosin | None | Allergen, Irritant, Respiratory
2-Propanol | Oral LD50 (Rat) = 5,045 mg/kg  
Oral LD50 (Mouse) = 3,600 mg/kg  
Oral LD50 (Rabbit) = 6,410 mg/kg  
Oral LD50 (Rat) = 4.7 g/kg  
Oral LD50 (Mouse) = 4.5 g/kg  
Oral LD50 (Rabbit) = 8.0 g/kg  
Oral LD50 (Rabbit) = 5.03 g/kg  
Dermal LD50 (Rabbit) = 12,800 mg/kg | Allergen, Central nervous system, Irritant
Talc | None | Irritant, Lung, Some evidence of carcinogenicity
Titanium dioxide | None | Irritant, Respiratory, Some evidence of carcinogenicity
Carbon black | Oral LD50 (Rat) = > 8,000 mg/kg | Respiratory, Some evidence of carcinogenicity
Quartz (SiO2) | None | Immune system, Lung, Some evidence of carcinogenicity

### Hazardous Component(s) | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen (Specifically Regulated)
--- | --- | --- | ---
Kaolin | No | No | No
Castor oil, oxidized | No | No | No
Rosin | No | No | No
2-Propanol | No | No | No
Talc | No | Group 2B | No
Titanium dioxide | No | Group 2B | No
Carbon black | No | Group 2B | No
Quartz (SiO2) | Known To Be Human Carcinogen. | Group 1 | No

### 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.

Hazardous waste number: D001: Ignitable.

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.

U.S. Department of Transportation Ground (49 CFR)

- Proper shipping name: Resin solution
- Hazard class or division: 3
- Identification number: UN 1866
- Packing group: III

International Air Transportation (ICAO/IATA)

- Proper shipping name: Resin solution
- Hazard class or division: 3
- Identification number: UN 1866
- Packing group: III
- Exceptions: Consumer Commodity ORM-D, ID8000, (Not more than 500 ml)

Water Transportation (IMO/IMDG)

- Proper shipping name: RESIN SOLUTION
- Hazard class or division: 3
- Identification number: UN 1866
- Packing group: III

15. REGULATORY INFORMATION

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.
- TSCA 12 (b) Export Notification: Blown castor oil (CAS# 68187-84-8).
- CERCLA/SARA Section 302 EHS: None above reporting de minimis.
- CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
- CERCLA/SARA Section 313: None above reporting de minimis.
- CERCLA Reportable quantity: 2-Propanol (CAS# 67-63-0) 100 lbs. (45.4 kg)
- California Proposition 65: This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

- CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

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

Prepared by: Timothy Pratt, Regulatory Affairs Specialist

Issue date: 11/17/2016
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