Material Safety Data Sheet
Gum Rosin

Section 1: Chemical Product and Company Identification
Product Name : Gum Rosin
Chemical Formula : C_{20}H_{30}O_{2}
Company Identification : Tradeasia International Pte Ltd
Email : contact@chemtradeasia.com

Section 2: Composition and Information on Ingredients
Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gum Rosin</td>
<td>8050-90-7</td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Rosin (Gum) LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects: Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

Potential Chronic Health Effects: Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to lungs, skin. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures
Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

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

Serious Inhalation: Not available

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available


Flammable Limits: Not available

Products of Combustion: These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...).

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks


Fire Fighting Media and Instructions: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards: Thermal decomposition products include formaldehyde, acetone, methanol, aldehydes, carbon dioxide, carbon monoxide, methane, ethane, and acids.

Special Remarks on Explosion Hazards: Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents.
Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area.

**Section 8: Exposure Controls/Personal Protection**

**Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Rosin Core Solder Pyrolysis Products: TWA: 0.1 (mg/m3) (as formaldehyde) from ACGIH (TLV) [United States] Gum Rosin (solid): TWA: 10 (mg/m3) Consult local authorities for acceptable exposure limits.

**Section 9: Physical and Chemical Properties**

**Physical state and appearance:** Solid

- **Odor:** Not available.
- **Taste:** Not available.
- **Molecular Weight:** 302.458 g/mole
- **Color:** Pale yellow to amber
- **pH (1% soln./water):** Not available.
- **Boiling Point:** Not available.
- **Melting Point:** 100-150°C
- **Critical Temperature:** Not available.
- **Specific Gravity:** 1.06 - 1.08 @ 25°C (Water = 1)
- **Vapor Pressure:** Not applicable.
- **Vapor Density:** Not available.
- **Volutility:** Not available.
- **Odor Threshold:** Not available.
- **Water/Oil Dist. Coeff.:** Not available.
- **Ionicity (in Water):** Not available.
- **Dispersion Properties:** See solubility in water, diethyl ether.
- **Solubility:** Soluble in diethyl ether. Insoluble in cold water, hot water. Soluble in alcohol, oils, benzene, carbon tetrachloride, glacial acetic acid, aliphatic, aromatic, and chlorinated hydrocarbons.
Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat.

Incompatibility with various substances: Reactive with oxidizing agents

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not available.

Special Remarks on Corrosivity: Not available

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: LD50: Not available. LC50: Not available.

Chronic Effects on Humans: May cause damage to the following organs: lungs, skin

Other Toxic Effects on Humans: Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Rosin has two types of hazards - from the rosin itself, and from the thermal decomposition products. The thermal decomposition products (aka Rosin Core Solder Pyrolysis Products) include formaldehyde, acetone, methanol, aldehydes, carbon dioxide, carbon monoxide, methane, ethane, and acids. The handling of the rosin in the solid state is expected to be a low hazard. It may cause skin, eyes, and respiratory tract irritation. Ingestion may cause digestion tract irritation. The thermal decomposition products of Rosin (Rosin core solder pyrolysis products) can be irritating to the eyes, nose, throat in acute exposure. Chronic Potential Health Effects: Skin: Repeated or prolonged skin contact with the rosin itself can cause contact dermatitis, an allergic reaction. It can also cause eczema. Inhalation: Repeated or prolonged inhalation of the rosin dust or smoke can cause asthma, an allergic reaction. Rosin core solder pyrolysis products can be sensitizing, and exposures should be reduced to as low as possible.
Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States)

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations: Minnesota: Rosin (Gum) TSCA 8(b) inventory: Rosin (Gum)


Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): R43- May cause sensitization by skin contact. S24- Avoid contact with skin. S37- Wear suitable gloves.

HMIS (U.S.A.):
Health Hazard: 2
Fire Hazard: 1
Reactivity: 1
Personal Protection: E

National Fire Protection Association (U.S.A.):
Health: 2
Flammability: 1
Reactivity: 0

Specific hazard:
Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

Section 16: Other Information
References: Not available.

Other Special Considerations: Not available.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Tradeasia International Pte. Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Tradeasia International Pte. Ltd. has been advised of the possibility of such damages.