Material Safety Data Sheet

SECTION I - IDENTIFICATION

PRODUCT NAME: POLYKEN® 1027 LIQUID ADHESIVE
CHEMICAL FAMILY: Petroleum hydrocarbon
DOT ID NO.: UN1139 (Coating Solution)
HAZARD CLASS: Flammable Liquid (IMO Class 3.0; WHMIS Class B, Division 2)

EMERGENCY TELEPHONE NUMBER: CHEMTREC 1-800-424-9300
OTHER TECHNICAL/HEALTH/SAFETY INFORMATION: (781) 372-2200

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>CAS REG. NO.</th>
<th>AMOUNT EXPOSURE LIMITS*</th>
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<tbody>
<tr>
<td>VM&amp;P NAPHTHA</td>
<td>8032-32-4</td>
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<tr>
<td></td>
<td>Approx. 60% 300 ppm TWA, 400 STEL</td>
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<tr>
<td>TOLUENE</td>
<td>108-88-3</td>
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<tr>
<td></td>
<td>Approx. 12% 100 ppm TWA, 150 STEL</td>
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<tr>
<td>METHANOL</td>
<td>67-56-1</td>
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<td></td>
<td>Approx. 1.5% 200 ppm TWA, 250 STEL</td>
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* OSHA 29 CFR 1910.1000, 8-hour Time Weighted Average and Short Term Exposure Limits.

SECTION III - PHYSICAL/CHEMICAL INFORMATION

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<tr>
<th>BOILING POINT: 230-278°F</th>
<th>VAPOR DENSITY (Air = 1): 4*</th>
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<tbody>
<tr>
<td>pH: Neutral</td>
<td>VAPOR PRESSURE: 45 mm Hg (75°F)*</td>
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<tr>
<td>SPECIFIC GRAVITY: 1.03</td>
<td>WATER SOLUBILITY: Negligible</td>
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<tr>
<td>FREEZING POINT: below 0°F</td>
<td>EVAPORATION RATE (BuAc=1): 2*</td>
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<tr>
<td>VISCOSITY: 56 cP</td>
<td>VOC: 4.9 lbs/gal</td>
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* Based on VM&P Naphtha (most volatile component)

SECTION IV - FIRE & EXPLOSION HAZARD DATA

FLASH POINT: 40°F (Pensky-Martens)
AUTOIGNITION TEMPERATURE: Approximately 480°F (VM&P Naphtha)
LEL: 1.2 % UEL: 7.1%
EXTINGUISHING MEDIA: Foam, CO2, Dry Chemical, water fog or spray.
SPECIAL FIRE FIGHTING PROCEDURES: If only water is available, use spray and not a direct hose stream. Isolate hazard area and do not permit unnecessary personnel to enter. Avoid breathing fumes or vapors. Wear full protective clothing, including NIOSH approved self contained breathing apparatus. Cool surrounding areas and exposed containers with water.
UNUSUAL FIRE & EXPLOSION HAZARDS: This material is a moderate explosion hazard and a dangerous fire hazard when exposed to heat and flame, due mostly to its flammable solvent content.
SECTION V - REACTIVITY DATA

STABILITY: Stable under most conditions. Avoid high temperatures, sparks, open flame.

INCOMPATIBILITY (Materials to avoid): Strong oxidizing agents such as liquid chlorine, pure oxygen, sodium hypochlorite, and calcium hypochlorite.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and complex organic hydrocarbons may be formed upon combustion.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Not determined for mixture; 100 ppm for Toluene; 300 ppm for VM&P Naphtha. 200 ppm for Methanol

COMPONENTS LISTED AS KNOWN OR POTENTIAL CARCINOGENS: None.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None known.

ACUTE EFFECTS OF OVEREXPOSURE:

INHALATION: May be irritating to mucous membranes. Inhalation of vapors may lead to giddiness, dizziness, nausea, and loss of consciousness.

SKIN CONTACT: May be mildly irritating to the skin. Prolonged or repeated exposure may result in defatting of skin, possibly leading to dermatitis.

EYE CONTACT: Short-term exposure may lead to irritation.

NOTE: Wearing contact lenses is not recommended when using this product.

INGESTION: Ingestion of the liquid may lead to vomiting.

CHRONIC EFFECTS OF OVEREXPOSURE: None known.

EMERGENCY & FIRST AID PROCEDURES:

INHALATION: Move affected person to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if necessary. Seek medical advice.

SKIN CONTACT: Flush with water, then wash affected area with soap and water. Remove contaminated clothing immediately and launder before reuse. If irritation develops, seek medical advice.

EYE CONTACT: Flush with water for at least 15 minutes and seek medical advice.

INGESTION: DO NOT INDUCE VOMITING! If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Seek medical advice.

TOXICITY INFORMATION:
VM&P NAPHTA ihl-hmn TCl0 600 mg/m3/8H oral-rat LD50 >5000 mg/kg
SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: DANGER! FLAMMABLE! Eliminate all ignition sources. Handling equipment must be grounded to prevent sparking.

LARGE SPILLS: Isolate the hazard area and keep unnecessary personnel away. Wear NIOSH-approved protective clothing and self-contained breathing apparatus. Ventilate area. Confine free liquid by digging and remove liquid with explosion-proof vacuum truck or pump to chemical storage vessel. Soak up residue with inert absorbent material such as clay or sand; place in leak-free container, label as to contents, and hold for proper disposal. Dispose of spill material according to applicable regulations.

DO NOT ALLOW MATERIAL TO ENTER SEWERS OR WATER COURSES LEADING TO SURFACE WATERS.

SMALL SPILLS: Take up with inert absorbent materials and place in non-leaking containers; label as to contents; seal tightly for proper disposal.

WASTE DISPOSAL: Dispose of material according to RCRA regulations. RCRA Number for Toluene is U220. D001 designates ignitable mixtures not specifically covered by another RCRA Number.

PRECAUTIONS FOR HANDLING AND STORING: Do not store in excessive heat so as to avoid pressure buildup in containers. Keep liquid away from very intense heat sources to eliminate decomposition into toxic products. Avoid inhalation of vapors and excessive or repeated skin contact.

SECTION VIII - CONTROL MEASURES

VENTILATION REQUIREMENT: Local or mechanical explosion-proof.

RESPIRATORY PROTECTION: If exposure exceeds, or there is a possibility that it may exceed OSHA exposure limits (200 ppm for Toluene; 300 ppm for VM&P Naphtha), use NIOSH approved respirators. At extreme exposure levels, use self-contained breathing apparatus.

PROTECTIVE GLOVES: Chemically impervious.

EYE PROTECTION: Goggles.

OTHER PROTECTIVE EQUIPMENT: Chemical impervious clothing to prevent skin contact.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Do not handle or store near heat, sparks, flame or strong oxidizers. Adequate ventilation required. Avoid breathing vapors; avoid prolonged or repeated skin contact.

NOTE: FLAMMABLE LIQUID LABEL REQUIRED!
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