SECTION 1 - PRODUCT IDENTIFICATION

Trade name: POLYROOF SF 3 GL
Product code: 361592 803

COMPANY: Tremco Incorporated
3735 Green Road
Cleveland, OH 44122

Telephone: (216) 292-5000 8:30 - 5:00 EST
Emergency Phone: (216) 765-6727 8:30 - 5:00 EST
After Hours: Chemtrec 1-800-424-9300

Product use: Adhesive

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview
Black. Liquid (paste). May cause slight irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause allergic respiratory sensitization. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel.

Acute Potential Health Effects/ Routes of Entry
Inhalation: May cause slight irritation to the respiratory system. May cause nausea, headaches, and dizziness. May cause drowsiness, weakness, and fatigue. May cause allergic respiratory sensitization.
Eyes: Direct contact may cause mild irritation.
Ingestion: May cause gastrointestinal irritation, nausea, and vomiting.
Skin: May cause sensitization resulting in irritation, itching and redness.

Aggravated Medical Conditions
Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Chronic Health Effects
Overexposure may cause dermatitis, asthma, skin and respiratory sensitization and decreased lung function. Prolonged or repeated exposure to butyl benzyl phthalate may cause reduced body weights and adverse effects on the liver, kidney, spleen, pancreas, and reproductive organs. Carbon black is classified by IARC to be a known animal carcinogen and a possible human carcinogen (Group 2B). Carbon black is encapsulated by resin and not expected to have adverse effects unless made airborne. Overexposure to maleic anhydride can cause allergic asthmatic responses and, after long-term exposure, bronchitis. Diphenylmethane disocyanate (methylenediphenyl isocyanate) caused an increased incidence of lung tumors in experimental animals following long term inhalation at concentrations in excess of 100 times the exposure limit. Fillers are encapsulated and not expected to be released from product under normal conditions of use.

Target Organs: Skin, Eye, Ingestion, Lung

SECTION 3 - PRODUCT COMPOSITION

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>64741-56-6</td>
<td>30.0 - 60.0</td>
</tr>
</tbody>
</table>
**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

**Inhalation**
- Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention. Move to fresh air. If required, artificial respiration or administration of oxygen can be performed by trained personnel.

**Eye contact**
- Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.

**Skin contact**
- Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.

**Ingestion**
- Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- **Flash point**: 162 °C, 324 °F
- **Method**: Setaflash Closed Cup
- **Lower explosion limit**: Not available.
- **Upper explosion limit**: Not available.
- **Autoignition temperature**: Not available.
- **Extinguishing media**: If water fog is ineffective, use carbon dioxide, dry chemical or foam.
- **Hazardous combustion products**: Carbon monoxide and carbon dioxide can form. Hydrocyanic acid and nitrogen oxides can form.
- **Protective equipment for firefighters**: Use accepted fire fighting techniques. Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA).

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Scrape up and transfer to appropriate container for disposal.
SECTION 7 - HANDLING AND STORAGE

Prevent inhalation of vapor, ingestion and contact with skin, eyes and clothing. Preferably use entire contents in one continuous work session. Do not smoke, weld, generate sparks, or use flame near container. Change soiled work clothes frequently. Clean hands thoroughly after handling. Do not store or use near food. Keep container closed when not in use. Since emptied containers retain product residue and vapor, observe precautions even after container is emptied. Store under dry warehouse conditions away from heat and all ignition sources.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved organic vapor or supplied air respirator when airborne contaminant level(s) are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.

Hand protection : Use suitable impervious nitrile or neoprene gloves and protective apparel to reduce exposure.

Eye protection : Wear appropriate eye protection. Use safety glasses if eye contact is likely.

Skin and body protection : Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

Protective measures : Use professional judgment in the selection, care, and use.

Engineering measures : Use general ventilation and/or local exhaust to reduce the airborne contaminant concentration below the exposure limit listed in the MSDS.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Regulation</th>
<th>Limit</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>64741-56-6</td>
<td>ACGIH TWA:</td>
<td>0.5 mg/m³</td>
<td>Inhalable fraction.as</td>
</tr>
<tr>
<td></td>
<td></td>
<td>benzene solubles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>ACGIH TWA:</td>
<td>3.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>3.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>15 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>5 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td>4,4’-Methylene bis(phenylisocyanate)</td>
<td>101-68-8</td>
<td>ACGIH TWA:</td>
<td>0.005 ppm</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td>Asphalt</td>
<td>64741-56-6</td>
<td>ACGIH TWA:</td>
<td>0.5 mg/m³</td>
<td></td>
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<td></td>
<td>Inhalable fraction.as</td>
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<tr>
<td>Carbon Black</td>
<td>1333-86-4</td>
<td>ACGIH TWA:</td>
<td>3.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>3.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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<td>15 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>5 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
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<td>101-68-8</td>
<td>ACGIH TWA:</td>
<td>0.005 ppm</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Regulation</th>
<th>Limit</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dioctyl phthalate</td>
<td>117-81-7</td>
<td>ACGIH TWA:</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Crystalline Silica (Quartz)/Silica Sand</td>
<td>14808-60-7</td>
<td>OSHA TWA:</td>
<td>0.1 mg/m³</td>
<td>Respirable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA TWA:</td>
<td>0.3 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>15 mg/m³</td>
<td>Total dust.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA PEL:</td>
<td>5 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TWA:</td>
<td>0.025 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
</tbody>
</table>

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid (paste)</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Ester</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.0504</td>
</tr>
<tr>
<td>% Volatile Weight</td>
<td>2 %</td>
</tr>
</tbody>
</table>

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid: Amines, Water or moisture and oxidizing agents, Alcohols, Strong acids, Strong bases.

Stability: Material is stable under normal storage, handling, and use.

Hazardous polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Butyl benzyl phthalate, CAS-No.: 85-68-7
Acute oral toxicity (LD-50 oral) 13,500 mg/kg (Rat)

4,4'-Methylene bis(phenylisocyanate), CAS-No.: 101-68-8
Acute inhalation toxicity (LC-50) 0.369 mg/l for 4 h (Rat) 0.38 mg/l for 4 h (Rat)

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Dioctyl phthalate, CAS-No.: 117-81-7
Acute oral toxicity (LD-50 oral) 25,000 mg/kg (Rat)
3,000 mg/kg (Mouse)
Acute dermal toxicity (LD-50 dermal) 25,000 mg/kg (Rabbit)

SECTIO 12 - ECOLOGICAL INFORMATION

No Data Available

SECTIO 13 - DISPOSAL CONSIDERATIONS

Disposal Method: Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste in compliance with state and local regulations.

SECTIO 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description: NOT REGULATED

SECTIO 15 - REGULATORY INFORMATION

North American Inventories:
All components are listed or exempt from the TSCA inventory.
This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:
SARA 313 Components: 4,4’-Methylene bis(phenylisocyanate) 101-68-8
SARA 311/312 Hazards: Acute Health Hazard
Chronic Health Hazard

OSHA Hazardous Components:
Asphalt 64741-56-6
Butyl benzyl phthalate 85-68-7
Carbon Black 1333-86-4
4,4’-Methylene bis(phenylisocyanate) 101-68-8
Asphalt 64741-56-6
Butyl benzyl phthalate 85-68-7
Carbon Black 1333-86-4
4,4’-Methylene bis(phenylisocyanate) 101-68-8
Dioctyl phthalate 117-81-7
Crystalline Silica (Quartz)/Silica Sand 14808-60-7

OSHA Status: Considered hazardous based on the following criteria:
Irritant
Sensitizer
Carcinogen
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POLYROOF SF 3 GL. POLYROOF SF 3 GL.

OSHA Flammability : IIIB

Regulatory VOC (less water and exempt solvent) : 21 g/l

VOC Method 310 : 2%

Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:
Carbon Black 1333-86-4

U.S. State Regulations:

MASS RTK Components :
Asphalt 64741-56-6
Butyl benzyl phthalate 85-68-7
Carbon Black 1333-86-4
4,4’-Methylene bis(phenylisocyanate) 101-68-8
Crystalline Silica (Quartz)/ Silica Sand 14808-60-7

Penn RTK Components :
Asphalt 64741-56-6
Polyurethane Polymer NJ TSRN# 51721300-5119P
Butyl benzyl phthalate 85-68-7
Carbon Black 1333-86-4
4,4’-Methylene bis(phenylisocyanate) 101-68-8

NJ RTK Components :
Asphalt 64741-56-6
Polyurethane Polymer NJ TSRN# 51721300-5119P
Butyl benzyl phthalate 85-68-7
Carbon Black 1333-86-4
Organophyllic clay NJ TSRN# 51721300-5118P

Components under California Proposition 65:
WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm

SECTION 16 - OTHER INFORMATION

HMIS Rating:

| Health | 1 |
| Flammability | 1 |
| Reactivity | 0 |
| PPE |

0 = Minimum 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Further information:
For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

Legend
ACGIH - American Conference of Governmental Hygienists
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
DOT - Department of Transportation
PEL - Permissible Exposure Limit
RCRA - Resource Conservation and Recovery Act
RTK - Right To Know

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DSL - Domestic Substance List
EPA - Environmental Protection Agency
HMIS - Hazardous Materials Information System
IARC - International Agency for Research on Cancer
MSHA - Mine Safety Health Administration
NDSL - Non-Domestic Substance List
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety and Health Administration

SARA - Superfund Amendments and Reauthorization Act
STEL - Short Term Exposure Limit
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
V - Volume
VOC - Volatile Organic Compound
WHMIS - Workplace Hazardous Materials Information System