

## MATERIAL SAFETY DATA SHEET

3735 GREEN ROAD TELEPHONE: (216)292-5000 EMERGENCIES: (216)765-6727 8:30-5:00 EST BEACHWOOD, OHIO 44122-8068 AFTER HOURS: CHEMTREC (800)424-9300

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SECTION 1 Order Code: 036APPSM601

Product Name: POWERPLY APP ROOFING MEMBRANE Chemical Name: MODIFIED BITUMEN MEMBRANE

Chemical Family:

Date Prepared: 15-NOV-00 Product Code: 036-APPXX Replaces Date: N/A MSDS Preparer: R. A. MIKOL

Other Applications:

THIS MATERIAL SAFETY DATA SHEET (MSDS) APPLIES TO THE FOLLOWING POWERPLY APP ROOFING MEMBRANES: 036-APPSM (POWERPLY APP Smooth), 036-APPBAS (POWERPLY APP Base Sheet), 036-APPFR (POWERPLY APP FR), 036-DLUX

| Section 2 - Molecular  | Composit       | ion     |                                     |              |              |
|--|----------------|---------|-------------------------------------|--------------|--------------|
| Common Name and Chemi<br>Exposure Limits                       |                |         |                                     |              | CAS Number   |
| ASPHALT  | OPP.           |         |                                     | 20.0-75.0    | 8052-42-4    |
| OSHA:TWA -<br>ACGIH:TWA 0.50 mg/M                              | STEL<br>3 STEL | -       | (as benzene extra<br>particulates)  | actable inha | alable       |
| RHYOLITIC ARGILLITE/R  | OOFING GR      | ANULES  |                                     | 0.0-35.0     | NONE         |
| OSHA:TWA 15 mg/M<br>ACGIH:TWA 10 mg/M                          |                | _       | (total nuisance (total nuisance (   |              |              |
| FIRE RETARDANT   |                |         |                                     | 0.0-25.0     | Trade Secret |
| OSHA:TWA -<br>ACGIH:TWA -                                      | STEL<br>STEL   | -       |                                     |              |              |
| ETHYLENE PROPYLENE CO  |                |         |                                     | 5.0-20.0     | 9010-79-1    |
| OSHA:TWA -<br>ACGIH:TWA -                                      | STEL<br>STEL   | _       |                                     |              |              |
| FIBROUS GLASS  |                |         |                                     | 0.0-35.0     | 65997-17-3   |
| OSHA:TWA -   | STEL           | -       | ( 7 )                               |              |              |
| ACGIH:TWA 10 mg/M  | 3 STEL         | _       | (dust)                              |              |              |
| CALCIUM CARBONATE (LI<br>OSHA:TWA 15 mg/M<br>ACGIH:TWA 10 mg/M | 3 STEL         | -<br>-  | (total dust, 5mg<br>(total dust, no |              |              |
| POLYESTER MAT  |                |         |                                     | 0.0-35.0     | 25038-59-9   |
| OSHA:TWA -<br>ACGIH:TWA -                                      | STEL<br>STEL   | -<br>-  |                                     | 0.0 33.0     | 23030 37 7   |
| CRYSTALLINE SILICA (Q  | IIARTZ)        |         |                                     | 5.0-35.0     | 14808-60-7   |
| OSHA:TWA -<br>ACGIH:TWA 0.050mg/M                              | STEL           | -<br>-  | (respirable dust (respirable dust   | )            | 11000 00 /   |
| POLYETHYLENE   |                |         |                                     | 0.0-10.0     | 9002-88-4    |
| OSHA:TWA -   | STEL           | _       |                                     | 0.0-10.0     | 9002-00-9    |
| ACGIH:TWA -  | STEL           | -       |                                     |              |              |
| POLYPROPYLENE (1-PROPOSHA:TWA -                                | ENE,HOMOP      | OLYMER) |                                     | 0.0-20.0     | 9003-07-0    |
| ACGIH: TWA -   | STEL           | -       |                                     |              |              |
|  |                |         |                                     |              |              |

White granules and/or sand on black roofing membrane. During torch application, hot material can cause burns. If on skin or eyes, apply cold water immediately and get medical attention as soon as possible.

## Potential Hlth Effect/Rte of Entry:

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Inhalation:

Heated product releases asphalt fumes which may cause nose, throat, and mucous membrane irritation, nausea, headaches, and dizziness.

Eyes:

Heated material can cause burns. Vapors from heated material can cause irritation.

Ingestion:

May cause mouth, throat, and gastrointestinal irritation, nausea, vomiting, and diarrhea.

Skin:

Prolonged or repeated contact may cause dryness, cracking, and irritation. Long-term exposure may increase sensitivity to the sun and cause discoloration. If product is heated, thermal burns may occur.

Aggravated Medical Conditions:

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

Acute Health Effects:

See effects described above.

## Chronic Health Effects:

Prolonged or repeated skin contact with asphalt in these products may result in irritation and dermatitis. Although a direct association between asphalt and cancer or other lung disease has not been established in man, asphalts contain variable amounts of polycyclic aromatic hydrocarbons and other volatiles which have been shown to cause cancer and respiratory damage in animals. Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica. OSHA considers fibrous glass dust a nuisance dust. No chronic hazard. Acute hazards are dermatitis, local irritation. ACGIH TLV is 10mg/m3 total dust. No other health hazards are known at this time.

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## Section 4 - First Aid Measures

Inhalation:

Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention immediately. Eyes:

Apply cold water immediately and get medical attention as soon as possible. Ingestion:

Ingestion of hot material is not probable.

Skin:

Apply cold water immediately and get medical attention as soon as possible.

Notes to Physician:

If hot material strikes the skin, immediately drench or immerse the area in water to assist cooling. If available, apply iced water or ice packs to the burned area. (DO NOT use iced water or ice packs if the burned area covers greater than 10% of the body, as this may contribute to shock.) DO NOT try to remove asphalt from a burn after it has cooled. Seek medical attention. Medical personnel can soften and remove cooled asphalt with petroleum jelly. For contact with cold material, clean with a waterless hand cleaner, then wash with mild soap and water. If irritation persists, seek medical attention.

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Section 5 - Fire Fighting Measures
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 Flash Point:
                           N/A
 Method:
                           N/A
 Lower Flammability Limit: N/A
 Upper Flammability Limit: N/A
 Autoignition Temperature: N/A
 Extinguishing Media:
   Water fog, carbon dioxide, dry chemical.
 Fire and Explosion Hazards:
   Not Applicable
 Special Fire Fighting Procedures:
   During a fire, personnel at the scene are to prevent exposure to fumes using accepted fire fighting techniques.
 Fire Fighting Equipment:
 Other Precautions:
   Not Applicable
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Section 6 - Accidental Release Measures
 Release Response Overview:
   Transfer to appropriate container for disposal.
Section 7 - Handling and Storage
Handling and Storage Precautions:
 Store under normal warehouse conditions. During torch application, caution
 must be used to prevent contact with hot material. Prevent inhalation of
 vapor. Change soiled workclothes frequently. Clean hands thoroughly after
 handling.
Section 8 - Exposure Controls/Personal Protection
 Respiratory:
   During torch application, use NIOSH/MSHA approved organic vapor respirator
   as directed by the manufacturer, when the vapor concentration exceeds the
   exposure limits indicated in Section 2.
 Skin:
   During torch application, protect hands with heat resistant gloves and use
   slip resistant shoes impervious to hot bitumens. Protect hands with
   suitable gloves when handling finished product.
   Wear suitable safety eyewear.
 Face:
   Face shield is recommended.
 Engineering:
   Use local exhaust when the general ventilation is not sufficient to keep
   the airborne contaminant concentration below the exposure limit in Section
   2 of the MSDS.
Section 9 - Physical and Chemical Properties
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 Odor/Appearance: SLIGHT/WHITE GRANULE &/OR SAND ON BLACK MEMBRANE
                     BLACK
SOLID ROLL PLY
 Color:
 Physical State:
 :Hq
                    N/A
 Vapor Pressure:
 Vapor Density:
 Boiling Point:
                     N/A
                 N/A
 Melting Point:
 Freezing Point: N/A
Solubility in Water: NEGLIGIBLE
 Freezing Point:
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Specific Gravity:
                       1.0
 % Volatile Weight:
                       0.0
Section 10 - Reactivity/Stability
  ______
 Stability:
  Stable
 Incompatible Products:
  Not Applicable
 Conditions to Avoid Polymerization:
  Not Applicable
Section 11 - Toxicological Information
 Eves:
                            SEE SECTION 3
 Ingestion:
                             11
 Inhalation:
                             11
                                  11
 Skin:
                             "
                                  "
 Subchronic:
 Chronic:
______
Section 12 - Ecological Information
______
 Ecotoxicological Data:
                           N/A
 Chemical Fate:
                           N/A
Section 13 - Disposal Considerations
 RCRA Class:
                           N/A
 Disposal Method:
  Not regulated by RCRA. Dispose of in compliance with state and local
  regulations.
 EPA Reportable Quantities
      N/A
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Section 14 - Transportation Data
 DOT Shipping Name: NOT REGULATED
 DOT Hazard Class:
 DOT Label:
 UN/NA Number:
 Packing Group:
 Special Provisions:
 Packaging
      Exceptions:
      Non-Bulk:
      Bulk:
 Quantity Limitations
      Passenger Aircraft or Railcar:
      Cargo Aircraft:
 Vessel Stowage Requirements
      Vessel Stowage:
      Other Stowage:
 Transportation Notes:
                           N/A
Section 15 - Regulatory Information
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section is - Regulatory information

TSCA Status: On the TSCA Inventory
OSHA Status: Considered hazardous based on the following criteria: Irritant Target Organs Lung Skin Eye OSHA Hazardous Components CAS Number \_\_\_\_\_ \_\_\_\_\_ CALCIUM CARBONATE (LIMESTONE) 1317-65-3 CRYSTALLINE SILICA (QUARTZ) 14808-60-7 \* - CHEMICAL IS LISTED AS AN IARC, NTP, OSHA, or ACGIH CARCINOGEN Compliance Quantities No Compliance Quantities SARA 311 Ratings Immediate Health Hazard: Delayed Health Hazard: Fire Hazard: Reactivity Hazard: Sudden Release of Pressure Hazard: N SARA 313 Ingredients \_\_\_\_\_\_ No SARA 313 Ingredients Proposition 65 Ingredients Chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm. CAS Number CRYSTALLINE SILICA (QUARTZ) 14808-60-7 8052-42-4 ASPHALT Section 16 - Other 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 HIS OWN INVESTIGATION OF COMPLIANCE WITH APPLICABLE REGULATIONS, INCLUDING THE SAFE USE OF THE PRODUCT UNDER EVERY FORESEEABLE CONDITION.