

MATERIAL SAFETY DATA SHEET

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

SECTION 1

Order Code: 036STD601 Product Name: POWERPLY STANDARD Chemical Name: Chemical Family: Roofing Felt 036-STD

Product Code: Date Prepared: 22-OCT-99 MSDS Preparer: R. A. MIKOL Replaces Date: N/A Other Applications: THIS MATERIAL SAFETY DATA SHEET (MSDS) Also applies to 034-STD Section 2 - Molecular Composition ______ Common Name and Chemical Name Weight % CAS Number Exposure Limits CALCIUM CARBONATE (LIMESTONE) 30.0-40.0 1317-65-3 (total dust, 5mg/M3 respirable fraction)
(total dust, no asbestos, <1% SiO2)</pre> OSHA:TWA 15 mg/M3 STEL -10 mg/M3 STEL -ACGIH: TWA RHYOLITIC ARGILLITE 25.0-35.0 NONE (total nuisance dust) OSHA:TWA 15 mg/M3 STEL 10 mg/M3 STEL ACGIH:TWA (total nuisance dust) ASPHALT 15.0-25.0 8052-42-4 OSHA:TWA - STEL ACGIH:TWA 5 mg/M3 STEL (fumes) MAGNESIUM CARBONATE 1.0-5.0 OSHA:TWA 15 mg/M3 STEL (total dust, 5mg/M3 respirable fraction) ACGIH: TWA 10 mg/M3 STEL (total nuisance dust) 5.0-10.0 14808-60-7 OSHA:TWA 0.10 mg/M3 STEL (respirable dust) ACGIH:TWA 0.10 mg/M3 STEL (respirable dust) 1.0-5.0 9003-55-8

CRYSTALLINE SILICA (QUARTZ) STYRENE-BUTADIENE-STYRENE BLOCK RUBBER OSHA:TWA - STEL ACGIH: TWA STEL

FIBROUS GLASS 1.0-3.0 65997-17-3 OSHA: TWA STEL ACGIH: TWA 10 mg/M3 STEL (dust)

KAOLTN 1.0-3.0 66402-68-4 (CLAY) OSHA:TWA 10 mg/M3 STEL - ACGIH:TWA 2.00 mg/M3 STEL -(total dust, 2mg/M3 respirable fraction)
(total dust, no asbestos, <1% SiO2)</pre>

SODIUM SILICATE 1.0-3.0 1344-09-8 OSHA:TWA 15 mg/M3 STEL - ACGIH:TWA 10 mg/M3 STEL -(total nuisance dust)
(total nuisance dust)

ACGIH: TWA FORMALDEHYDE-UREA BINDER 0.5-1.0 9011-05-6 OSHA:TWA - STEL ACGTH: TWA STEL

FORMALDEHYDE 0.0-0.01 50-00-0

OSHA:TWA 0.75 ppm STEL 2.00 ppm Ceil 0.30 ppm ACGIH:TWA -

Section 3 - Hazards Identification

Emergency Overview:

White granules on black roofing membrane. During manufacture, 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:

Inhalation:

During manufacture, vapors from hot material can cause irritation to respiratory system.

Eyes

During manufacture, hot material can cause burns.

Ingestion:

Toxic by ingestion.

Skin:

During manufacture, hot material can cause burns.

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. Long term exposure to formaldehyde has been shown to be associated with an increased risk of cancer of the nose and accessory sinuses, nasopharyngeal and oropharyngeal cancer, and lung cancer in humans.

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.

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
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 manufacture, 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 manufacture, use, NIOSH/MSHA approved organic vapor respirator when
  the vapor concentration exceeds the exposure limits indicated in Section 2.
 Skin:
  During manufacture, protect hands with heat resistant gloves and use slip
  resistant shoes impervious to hot bitumens. Protect hands with suitable
  gloves when handling finished product.
 Eves:
  During manufacture, use chemical splash goggles.
 Face:
  During manufacture, face shield is recommended.
 Engineering:
  During manufacture, use local exhaust when general ventilation is not
   sufficient to keep airborne contaminant concentration below exposure
  limit in Section 2.
Section 9 - Physical and Chemical Properties
 Odor/Appearance: SLIGHT/WHITE GRANULED ROOFING MEMBRANE Color: WHITE/BLACK
 Physical State:
                      SOLID
 pH:
                       N/A
                      N/A
 Vapor Pressure:
 Vapor Density:
                      N/A
 Boiling Point:
                       N/A
 Melting Point:
                       N/A
 Freezing Point:
                       N/A
 Solubility in Water: N/A
                     1.0
 Specific Gravity:
 % Volatile Weight:
                       0.0
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Section 10 - Reactivity/Stability
                          _____
 Stability:
  Stable
 Incompatible Products:
  Not Applicable
 Conditions to Avoid Polymerization:
  Not Applicable
Section 11 - Toxicological Information
                            SEE SECTION 3
 Eyes:
                                "
 Ingestion:
                             11
                             11
 Inhalation:
 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
Section 14 - Transportation Data
 DOT Shipping Name: NOT REGULATED
 DOT Hazard Class:
 DOT Label:
 UN/NA Number:
                  N/A
 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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TSCA Status: On the TSCA Inventory
OSHA Status: Considered hazardous based on the following criteria: Irritant Target Organs -----Lung Skin OSHA Hazardous Components CAS Number _____ KAOLIN (CLAY) 66402-68-4 CALCIUM CARBONATE (LIMESTONE) 1317-65-3 MAGNESIUM CARBONATE 546-93-0 14808-60-7 CRYSTALLINE SILICA (QUARTZ) * ASPHALT 8052-42-4 FORMALDEHYDE 50-00-0 * - CHEMICAL IS LISTED AS AN IARC, NTP, OSHA, or ACGIH CARCINOGEN Compliance Quantites N/ASARA 311 Ratings Immediate Health Hazard: Delayed Health Hazard: Fire Hazard: Reactivity Hazard: Sudden Release of Pressure Hazard: N SARA 313 Ingredients CAS Number 50-00-0 FORMALDEHYDE Proposition 65 Ingredients _____ Chemicals known to the State of California to cause cancer, CAS Number birth defects and/or other reproductive harm. 14808-60-7 CRYSTALLINE SILICA (QUARTZ) ASPHALT 8052-42-4 FORMALDEHYDE 50-00-0

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.