

MATERIAL SAFETY DATA SHEET

This MSDS complies with 29 CFR 1910.1200 (OSHA Hazard Communication Standard) and Canadian WHMIS Regulations.

IMPORTANT: Read this MSDS before handling and disposing of this product.

Pass this information on to employees, customers and users of this product.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: JS500, AFM500, & PSDS Detail Tape

| | |
|--|---------------------------------------|
| Intended Use: Construction Waterproofing Material | HMIS Hazard Ratings |
| | Health 1* |
| | Fire 1 |
| | Reactivity 0 |
| Manufacturer: Protecto Wrap Company 1955 South Cherokee Street Denver, CO 80223 | |
| Telephone: (303) 777-3001 | |
| Fax: (303) 777-9273 | Internet: www.protectowrap.com |

Emergency Phone: CHEMTREC: (800) 424-9300

MSDS Date of Preparation: 12/6/00

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2. COMPOSITION/INFORMATION ON INGREDIENTS

| <u>Hazardous Component</u> | <u>CAS No.</u> | <u>Amount</u> | <u>Exposure Limit</u> |
|------------------------------|----------------|---------------|--|
| Asphalt (petroleum; bitumen) | 8052-42-4 | 50-80% | 0.5 mg/m ³ TLV-TWA |
| Calcium Carbonate | 1317-65-3 | 10-20% | 5 mg/m ³ PEL-TWA (respirable fraction) 10 mg/m ³ TLV-TWA |

Non-Hazardous Components >1%: Resins and Polymers 10-30%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

This product is a black, opaque, tacky solid with no odor. Product is not flammable but will burn under fire conditions. May cause mild eye and skin irritation. Contact with heated product may cause thermal burns. Inhalation of vapors from heated product may cause irritation of the nose, throat and respiratory system. Potential cancer hazards based on animal data.

4. FIRST AID MEASURES

EYE: First check victim for contact lenses and remove if present. Flush victim's eyes with large quantities of water for at least 15 minutes, holding the eyelids apart. Get medical attention if irritation persists.

SKIN: Remove contaminated clothing. Wash skin thoroughly with soap and water. If rash or irritation develop, get medical attention. Launder clothing before re-use. (Discard contaminated shoes)

INGESTION: If conscious, rinse mouth with water. Never give anything by mouth to an unconscious or convulsing person. Get medical attention.

INHALATION: Remove victim to fresh air. If breathing is difficult have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT: >320° F

FLAMMABLE LIMITS: LEL: Not applicable UEL: Not applicable

AUTOIGNITION TEMPERATURE: Not determined

EXTINGUISHING MEDIA: Use foam or dry chemical to extinguish fire. Use fog nozzles if water is used. Water streams may cause violent eruptions and spread the burning of asphalt. Use water to cool fire exposed containers and structures.

UNUSUAL FIRE OR EXPLOSION HAZARDS: Product will burn if exposed to elevated temperatures or fire. Hot asphalt may ignite flammable mixtures on contact. Toxic vapors including hydrogen sulfide may be released upon combustion. Hydrogen sulfide vapors are heavier than air, may accumulate in low areas and flashback if ignited.

SPECIAL FIRE-FIGHTING INSTRUCTIONS: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Do not allow run-off from fire fighting to enter drains or water courses.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, sulfur oxides, hydrogen sulfide, acrolein, aldehydes, ketones and unidentified organic compounds may be formed on combustion.

EXPLOSION DATA (sensitivity to mechanical impact or static discharge): None known.

6. ACCIDENTAL RELEASE MEASURES

Pick up and place into an appropriate container for disposal. If product becomes molten, allow product to cool before picking or scraping up.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with the eyes and skin. Avoid breathing vapors, mists or fumes. If product is heated, use with adequate ventilation. Wash with soap and water after use.

Do not cut, drill, grind or weld on or near containers, even empty containers. Empty containers retain product residues can be hazardous. Follow all MSDS precautions when handling empty containers.

STORAGE: Store in a cool, well ventilated area away from excessive heat and sources of ignition. Do not enter confined storage areas without proper precautions including atmospheric testing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: General ventilation should be adequate for normal use. For operations where the TLV may be exceeded, mechanical ventilation such as local exhaust may be needed to maintain exposure levels below applicable limits.

RESPIRATORY PROTECTION: None needed under ambient conditions. For situations where the product is heated, hydrogen sulfide may be released. In such conditions, a NIOSH/MSHA approved positive pressure self-contained breathing apparatus is recommended. Gas masks or other air purifying respirators are not recommended for hydrogen sulfide due to its poor odor warning properties. Equipment selection depends on containment type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

SKIN PROTECTION: If heated, wear leather gloves to prevent thermal burns.

EYE PROTECTION: Safety glasses or goggles should be worn where contact is possible.

OTHER: Wear long sleeved shirt and long pants to avoid skin contact. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Opaque black, tacky solid with no odor.

PHYSICAL STATE: Solid

BOILING POINT: Not applicable

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

EVAPORATION RATE: Not applicable

SOLUBILITY IN WATER: Insoluble

BULK DENSITY: 15.723 pounds/gallon

SPECIFIC GRAVITY: 1.883

pH: NA

MELTING POINT: 220°F (104°C) (Softening Point)

OCTANOL/WATER COEFFICIENT: No data available

VOC CONTENT: 0%

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal storage and handling conditions.

INCOMPATIBILITY: Strong oxidizers. Avoid water if product is molten.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, sulfur oxides, hydrogen sulfide, acrolein, aldehydes, ketones and unidentified organic compounds.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS:

INGESTION: No adverse effects are expected from normal use. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

INHALATION: No adverse effects expected at ambient temperatures. Vapors released from heating product may cause respiratory irritation. At elevated temperatures hydrogen sulfide may be released. The release of hydrogen sulfide gas in various concentrations may cause irritation of the eyes and respiratory tract, headache, dizziness, nausea and drowsiness. Exposure to high concentrations of hydrogen sulfide can cause respiratory arrest and death.

EYE: May cause irritation with redness, tearing and blurred vision. Contact with product at elevated temperatures may cause thermal burns.

SKIN: May cause irritation, defatting of the skin and dermatitis. Contact with product at elevated temperatures may cause thermal burns.

SENSITIZATION: This product is not expected to cause sensitization.

CHRONIC/CARCINOGENICITY: No adverse effects expected at ambient temperatures. Prolonged inhalation of asphalt smoke has been shown to cause bronchitis, pneumonitis and abscess formation in laboratory animals. Asphalt fume condensates have been shown to cause tumorigenic responses when repeatedly applied to the skin of laboratory animals. Prolonged inhalation of talc dust may cause lung damage (pulmonary fibrosis), however, the talc in this product is bound in a polymer matrix and dust exposure would not be expected. Asphalt (petroleum, bitumen) is listed by IARC as "Possibly Carcinogenic to Humans", Group 2B.

MUTAGENICITY: No adverse effects from available data.

SYNERGISTIC PRODUCTS: None specifically known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Employees with pre-existing skin and respiratory disorders may be at increased risk from exposure.

ACUTE TOXICITY VALUES:

Asphalt: Oral Rat LD50 - >5.0 g/kg

Skin Rabbit LD50 - > 2.0 g/kg

Skin Rabbit LD50 - 14100 uL/kg

Calcium Carbonate: No acute toxicity data available

12. ECOLOGICAL INFORMATION

No ecotoxicity data is available for this product at this time.

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state and federal environmental regulations.

14. TRANSPORT INFORMATION

DOT HAZARDOUS MATERIALS DESCRIPTION:

Proper Shipping Name: Not Regulated

UN Number: None

Hazard Class/Packing Group: None

Labels Required: None

15. REGULATORY INFORMATION

CERCLA/SUPERFUND: This product is not subject to CERCLA reporting requirements.

SARA HAZARD CATEGORY (311/312): Acute Health, Chronic Health

SARA 313 INFORMATION: This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

EPA TSCA INVENTORY: All of the ingredients in this product are listed on the EPA TSCA Inventory.

CALIFORNIA PROPOSITION 65

This product contains the following chemicals known to the State of California to cause cancer:
None

CANADA:

This product has been classified under the CPR and this MSDS discloses information elements required by the CPR.

CANADIAN WHMIS CLASSIFICATION: Not a controlled product (manufactured article).

CANADIAN CEPA: All the components of this product are listed on the Canadian DSL.

16. OTHER INFORMATION

NFPA RATING: Health = 1 Fire = 1 Reactivity = 0

HMIS RATING: Health = 1* Fire = 1 Reactivity = 0

REVISION SUMMARY: New Product

NOTICE

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control and therefore, users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.