MATERIAL SAFETY DATA SHEET

(In compliance with OSHA Regulation 29 CFR 1910.1200 - Hazard Communication)

IDENTITY: FlexMaster
Product No. M1001

SECTION I - Manufacturer / Product Information	
Manufacturer's Name: SealMaster Industries, Inc.	**Emergency Telephone No.:** Chemtrec: 1-800-424-9300
Address: 2520 South Campbell Street Sandusky, Ohio 44870	**Telephone Number for Information:** 1-419-626-4375
	Date Prepared: September 20, 1999

SECTION II - Hazardous Ingredients / Identity Information

Hazardous Components: Specific Chemical Identity; Common Name, CAS No.	**Exposure Limits**		**Other Limits Recommend.**	**% (Optional)**
	OSHA PEL *-(1)*	**ACGIH TLV *-(2)***		
Petroleum asphalt fumes ***(3)*** CAS # 8052-42-4		5 mg/m3		31-36
Crystalline Silica (Quartz) CAS# 14808-60-7	10 mg/m3	0.1 mg/m^3		0.5-3.0

(*) Indicate toxic chemical subject to the reporting requirement of section 313 of SARA Title III and 40 CFR 372 (Code of Federal Regulations). (A chemical or chemical category listed by the EPA is subject to toxic chemical release reporting under the Emergency Planning and Community Right-To-Know Act of 1986). There are no components in the formulation that are presently subject to this reporting requirement.

(1) (OSHA Permissible Exposure Limit) - These limits express the permissible maximum amount of a chemical to which a person may be exposed. The concentrations listed refer to airborne exposure, as might occur (via mist), which is unlikely to occur with this product in view of its properties and intended use.

(2) (American Conference of Govemmental Industrial Hygienists' Threshold Limit Value) - This value is expressed in parts per million. The TLV is the concentration of substance in the air that can be breathed for five consecutive eight hour workdays (40-hour work week) by most people, without harmful effects.

(3) The TLV for asphalt is intended for the fumes given off when this component is heated.

SECTION III - Physical / Chemical Characteristics
Boiling Point: 212^{o} Fahrenheit
Specific Gravity (Water = 1): 1.0-1.2
Vapor Pressure (mm Hg) Is nearly equal to that of water. ***-(1)***
Melting Point: Not Applicable
Vapor Density: > 1
Evaporation Rate (Butyl Acetate = 1): Essentially the same as water.
Solubility in Water: Easily dispersible in water, in the wet state.
Appearance: Brownish - black thick liquid
Odor: Asphalt odor
(1) The vapors off this product are at least 90% water from 0^{o} Celsius to 100^{o} Celsius.

SECTION IV - Fire and Explosion Hazard Data
HMIS Rating: 0
Flash Point (Method Used): Non Combustible
Flammable Limits in Air: Not Applicable.
Extinguishing Media: Foam, CO_2, dry chemical, water fog, other.
Special Fire Fighting Methods: Full protective equipment, including self-contained breathing apparatus, to be worn.
Unusual Fire & Explosion Hazards: Not Applicable.

SECTION V - Reactivity Data
HMIS Rating: 0
Stability: Stable
Conditions to Avoid: Keep away from open flames, keep away from strong oxidizers.
Hazardous Decomposition or Byproducts: Combustion may form carbon dioxide, carbon monoxide, oxides of nitrogen, oxides of sulfur, and other hydrocarbons.
Hazardous Polymerization: Will not occur.

SECTION VI - Health Hazard Data

HMIS Rating: 1

Primary Routes of Exposure:

Inhalation: Yes
Eye Contact: Yes
Skin Contact: Yes
Ingestion: Yes

Health Hazards (Acute & Chronic): (Acute): Irritation to eyes, skin, lungs.
(Chronic): Dermatitis possible.

Signs and Symptoms of Exposure:

Inhalation: The vapors may cause irritation to the lungs after repeated exposure.

Eye: Direct contact with hot emulsified asphalt to eyes may cause permanent eye damage. Vapors may cause irritation to the eyes.

Skin: May be a skin irritant to some people.

Ingestion: Stomach irritation, nausea, and vomiting

Medical Conditions Generally Aggravated by Exposure: Persons with a skin rash, irritation, or other skin disorders should not let emulsified asphalt contact afflicted areas.

Carcinogenicity: National Toxicology Program (NTP): No
International Agency for Research on Cancer (IARC) Monographs: No
OSHA Regulated: No

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention. If breathing stops, begin artificial resuscitation and SEEK IMMEDIATE EMERGENCY MEDICAL TREATMENT. Rescuers entering a closed vessel or tank to attempt rescue must wear positive-pressure full face piece, self contained or supplied air NIOSH approved respirators.

Ingestion: If emulsified asphalt is swallowed, do not induce vomiting. If vomiting begin, lower person's head in an effort to prevent vomitus from entering the lungs. SEEK IMMEDIATE MEDICAL TREATMENT.

Skin Contact: Remove contaminated clothing as soon as possible. Wash exposed skin thoroughly with waterless hand cleaner and soap and water. If irritation develops, consult of physician. If exposed to hot emulsified asphalt and thermal burns are evident or suspected, immediately cool with cold water. In cases suspecting burns, do not attempt to remove asphalt or clothing and SEEK EMERGENCY MEDICAL TREATMENT.

Eye Contact: Immediately flush eyes with plenty of water for at least 5 minutes and CALL A PHYSICIAN.

NOTE: The International Agency for Research on Cancer (IARC) conducted a thorough literature search in 1985 and determined that there is inadequate evidence for the carcinogenicity of undiluted air refined (i.e., free of solvents) asphalt in animals or humans. IARC also concluded that mouse skin painting studies showed that extracts of asphalt caused skin tumors. However, these solvent and the resulting extract does not realistically characterize asphalt to which humans are exposed. The same criticism applies to studies that showed roofing asphalt fume condensate or steam-refined asphalt caused skin cancer in similar mouse painting studies. These animal data should be interpreted cautiously since the health effects may be dependent on variables such as solvent extraction/solvent dilution, source of crude oil, manufacturing process and that these studies involved repeated exposure of shaved skin which was never washed free of test material.

(*) In considering the information on the previous page, remember that good hygiene practices can be helpful in preventing adverse health effects: for example, exposure to asphalt and its fumes can be minimized by using protective clothing or devices and skin contaminated with asphalt should be washed. At the relatively low temperatures (60^{o} - 180^{o} F.) at which emulsified asphalt is stored, handled and used, petroleum asphalt does not give off fumes. The possibility of thermal burns from hot emulsified asphalt acts as a deterrent against skin, eye, or inhalation exposure. Intermittent or occasional skin contact with petroleum asphalt is not expected to have serious health effects as long as good personal hygiene measures, such as those outlined in this Material Safety Data Sheet are followed.

SECTION VII - Precautions for Safe Handling and Use

Steps To Be Taken In Case Material Is Released Or Spilled: Contain spill immediately in smallest area possible using soil, fly ash, or other fine, dry aggregates. Recover as much of the product as possible by mechanical means such as pumping, vacuuming, or shoveling. Residual emulsified asphalt should be recovered by using absorbent materials. Non-recoverable product and contaminated soils and other materials should be picked up and placed in containers for ultimate disposal. Avoid washing, draining, or directing materials to storm or sanitary sewers, rivers, streams, lakes, and other bodies of water.

Waste Disposal Method: Treatment, storage, transportation and disposal must be in accordance with applicable federal, state, and local regulations. Recycle as much of the recoverable products as possible.

Precautions To Be Taken In Handling And Storing: Keep from freezing, or extreme heat. - Freezing or temperatures above 180^{o} Fahrenheit will cause emulsified asphalt to permanently separate into layers of water over asphalt. The surface temperature of any heating element or surface should not exceed the boiling temperature of water. Agitation of material while heating is recommended.

Other Precautions: Do not use when rain is imminent or forecast to prevent contamination of runoff water.

SECTION VIII - Control Measures

Respiratory Protection (Specify Type): None required for normal conditions of use. If operating conditions cause a mist, use a NIOSH / OSHA approved dust/mist respirator.

Ventilation:

Local Exhaust: If used in confined spaces, and mist is generated, use mechanical ventilation to reduce mist concentrations below PEL.

Protective Gloves: The use of chemically resistant NBR or neoprene gloves is recommended.

Eye Protection: Chemical safety goggles must be worn at all times when working with emulsified asphalt

Other Protective Clothing or Equipment: Long sleeves and long pants should be worn.

Work / Hygienic Practices: Skin contact should be minimized. Do not use solvents to remove asphalt, they may cause skin irritation.

SECTION IX - Disclaimer

All information, recommendations, and suggestions concerning this product are based upon tests, literature references, and/or calculations, believed to be reliable. The manufacturer makes no guarantee, expressed or implied, as to the affect of use, or the safety and toxicity of the product. The information contained in this sheet cannot be taken as the sum total of all protective measures to be taken.