



## **SUMMARY: HAZARD COMMUNICATION**

### **Michigan Department of Transportation**

Developed February 1987  
Revised June 2004

#### **Summary of Procedure for Hazard Communication**

- Each location is to have a copy of the written Hazard Communication Program available.
- Each location shall have a list of all hazardous chemicals used by that location's employees either on site or on projects.
  - This list must consider all hazardous chemicals in all physical forms - liquids, solids, gases, vapors, fumes, and mists.
- All containers of hazardous chemicals must be labeled, tagged, or marked with the identity of the material and the appropriate hazard warnings. Any unlabeled container may be considered an "imminent danger".
- Hazardous chemicals transferred from a labeled container to another container and not used "immediately" must be labeled.
- Each location shall inform employees of the hazards associated with chemicals contained in unlabeled pipes in their work areas or otherwise label all overhead piping (compressed air, natural gas, etc.).
- Each location to post, by use of the Michigan Occupational Safety and Health Administration (MIOSHA) poster #2105, the name of the person responsible for maintaining all Material Safety Data Sheets (MSDS).
- Material Safety Data Sheets (MSDS) must be on-site for hazardous chemicals and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s).
- MSDS shall be organized in a systemic and consistent manner for easy reference by the employees.
- Any hazardous chemical without a Material Safety Data Sheet (MSDS) is not be used until a MSDS is received.
- Within 5 days of knowing of the existence of a new or revised MSDS, the location must post, for a period of 10 working days, a notice of the existence of the new or revised MSDS (MIOSHA poster #2106).

- MSDS are to be current and up to date. They should be periodically reviewed. MSDS that are three (3) years old or more should be confirmed for accuracy with the MSDS preparer. Old MSDS should be archived for future reference as potential employee exposure to chemicals can be considered a medical record.
- It is the responsibility of the location to communicate with contractors performing work on state property as to the identity of any chemicals they may come in contact with.
- It is the responsibility of the contractor to advise the MDOT location of any chemicals that they will be bringing on-site and what the associated hazards are. MSDS must be available on-site while contractor work is being performed.
- Each MDOT location will provide training on the Hazard Communication Program to all employees within the location's responsibility. Each employee who may be "exposed" to hazardous chemicals when working must be provided information and trained prior to initial assignment to work with a hazardous chemical, and whenever the hazard changes.
- Employees shall be informed of:
  - This written hazard communication program and the location and availability thereof.
  - The requirements of the written program.
  - Any operations in their work area where hazardous chemicals are present.
  - The required list(s) of hazardous chemicals for their location.
  - The location of the Material Safety Data Sheets (MSDS).
- Records of attendance of Hazard Communication Program training of all employees within the location must be retained.



MATERIAL SAFETY DATA SHEET (MSDS)  
SC-000-100 REV. 1 DATE 2-27-86 CODE 06-19  
 CONFORMS TO REQUIREMENTS OF OSHA STANDARD 1910.1200  
 "HAZARD COMMUNICATION"

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**SECTION I PRODUCT IDENTIFICATION**

VENDOR'S PRODUCT NAME: Polymer Modified Anionic Asphalt Emulsion  
Product types: HF-ST

GENERAL OR GENERIC ID: Petroleum asphalt  
VENDOR NAME AND ADDRESS: Koch Asphalt Company  
 P.O. Box 2256  
 Wichita, Kansas 67201  
EMERGENCY PHONE NUMBER: 316-672-6872

FIRE HAZARD CLASS: HEALTH: 0 FIRE: 1 REACTIVITY: 0  
 THE FOURTH DIAMOND:  
 ANSI: CAUTION! CAUSES IRRITATION. AVOID CONTACT WITH THE EYES, SKIN,  
 AND CLOTHING.

**SECTION II - HAZARDOUS COMPONENTS**

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>PERCENT</u>	<u>TLV</u>	<u>PEL</u>
Petroleum asphalt (fumes)	8052-42-4	62-68	5 mg/cu.m	N/E
Tall Oil	N/A	<2	N/E	N/E
Elastomeric solids	N/A	2-6	N/E	N/E
Additives	N/A	0.25	N/E	N/E
Water	7732-18-5	balance	N/E	N/E

The TLV for asphalt is intended for the fume that is given off when asphalt is heated.

The identity of the additives is confidential, however they are not considered hazardous as contained in this product.

**SECTION III - OVERVIEW**

These asphalt emulsions are asphalt products containing tall oil emulsifiers, elastomeric solids, additives, and water.

The product will burn like other high flashpoint hydrocarbons if the water is removed.

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N/E means none established. N/A means not applicable  
 N/D means no data available.

Asphalt can form fumes when heated. In confined spaces or in high concentrations these fumes are capable of causing eye and respiratory irritation. Experiments with animals and human studies have shown that petroleum asphalt fumes are not capable of causing cancer.

The product contains small amounts of additives. The amount and composition of the additives can vary depending on the formulation. Because the additives are used in such small amounts, it is assumed that if the major ingredients are controlled these minor ingredients will also be controlled.

**SECTION IV - PHYSICAL DATA**

PHYSICAL DESCRIPTION: Chocolate brown liquid, sweetish odor  
BOILING POINT: 212 F  
VAPOR PRESSURE: 23.7 mm of Hg @ 77 F  
VAPOR DENSITY: 0.62  
SOLUBILITY IN WATER: Soluble  
SPECIFIC GRAVITY: 1.02  
PERCENT VOLATILE BY VOLUME: Approx 30%  
EVAPORATION RATE: N/D

**SECTION V - FIRE AND EXPLOSION DATA**

FLASH POINT (CLOSED CUP) : None unless water is removed  
EXPLOSIVE LIMITS: N/D  
AUTOIGNITION TEMP: N/D  
FIRE POINT: N/D  
EXTINGUISHING MEDIA: Dry chemical, water fog, foam, CO2  
HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, aldehydes, and other unidentified compounds may form upon combustion.  
SPECIAL FIRE FIGHTING PROCEDURES: If entering a confined area, firefighters should wear a NIOSH approved self-contained breathing apparatus.  
UNUSUAL FIRE & EXPLOSION HAZARDS: May foam if heated to 212 F or if mixed with materials in excess of 212 F.

**SECTION VI - HEALTH HAZARD DATA**

EYES: Irritation  
SKIN: Mild irritation. Repeated or prolonged contacted can cause dermatitis.  
BREATHING: Respiratory irritation, nausea, dizziness, headache.  
SWALLOWING: Stomach irritation, nausea, and vomiting.  
 ===== FIRST AID =====  
IF IN EYES: Flush with large amounts of water while holding eyelids open. Get medical attention if irritation persists.  
IF ON SKIN: Wash with soap and water or use waterless hand cleaner. Do not use solvents or thinners to clean the skin.

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IF BREATHED: Remove to fresh air. If breathing is difficult, give oxygen; if breathing has stopped, give artificial respiration. Get medical attention.

IF SWALLOWED: If victim is conscious, give liquids. INDUCE VOMITING. Call a physician.

**SECTION VII - REACTIVITY DATA**

HAZARDOUS POLYMERIZATION: Will not occur.

STABILITY: Stable

INCOMPATIBILITY: Avoid contact with strong oxidizers.

**SECTION VIII - SPILL OR LEAK PROCEDURES**

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Dike or contain spill with earth, floor dry, sand, etc. Pump liquid to containers or storage vessel. Soak up residue with absorbent material. Scoop contaminated absorbent and diking material into containers for disposal.

WASTE DISPOSAL METHOD:

Recovered materials may be fluxed with solvent and blended with aggregate for use as patching or for other maintenance use. Other wastes should be disposed of according to federal, state, and local regulations.

**SECTION IX - PROTECTIVE EQUIPMENT TO BE USED**

RESPIRATORY PROTECTION: NIOSH approved cartridge respirator with organic vapor cartridges if other controls are not effective.

VENTILATION: Normal ventilation is usually adequate.

PROTECTIVE GLOVES: Impervious gloves such as neoprene or vinyl.

EYE PROTECTION: Wear chemical safety goggles if splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Wear a protective apron if splashing or repeated contact is likely.

**SECTION X - SPECIAL PRECAUTIONS OR OTHER COMMENTS**

STORAGE: Do not allow to freeze.

Do not contaminate with cationic emulsions or other asphalt materials.

Do not exceed 200 F.

INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE RELIABLE AND IS ACCURATE AND RELIABLE TO THE BEST OF OUR KNOWLEDGE AND BELIEF BUT IS NOT GUARANTEED TO BE SO.

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