LAKE ASPHALT

OF TRINIDAD AND TOBAGO (1978) LIMITED

Office:
Brighton, La Brea
Trinidad, West Indies

Phone: 868 648 7555/7556/7547
Fax : 868 648 7433/7521

DATE: January 2015

MATERIAL SAFETY DATA SHEET

(M S D S)

1. Product Identification

Product Name: **60/70 Bitumen**

Origin: Obtained from petroleum by evaporating the lighter hydrocarbons and the partial oxidation of the residue.

Other Names: Asphaltene, mineral pitch and petroleum asphalt

CAS#: 8052-42-4

UN #: 1999 Class 3

Composition: Comprises mainly hydrocarbon chains classified as maltenes and asphaltenes.

2. Physical and Chemical Properties

Appearance:	A semi-solid, brown to black material	
Properties:	Softening Point	45 - 56 °C
	Specific Gravity (25 °C ASTM D70)	1.01 – 1.07 g/cm^3
REACTIVITY:	Stable at room temperature. Hazardous polymerization cannot occur.	
CHEMICAL INCOMPATIBILITIES:	Mixing with volatile solvents will increase ability of the product to readily ignite.	

3. Fire Protection

Flash Point: (**ASTM D92**) 225 °C (Min)

Extinguishing Media: Foam, dry chemical or carbon dioxide used to fight fires.

Unusual Fire or Explosion Hazard: Slight fire hazard when exposed to heat, flame or fluorine. Vapours may travel to an ignition source and flash back.

Conditions to Avoid: Avoid contact with heat, flame or fluorine. When cooled in closed systems (not well ventilated), hydrogen sulphide gas (due to small quantities of sulphur present), carbon monoxide and other aliphatic hydrocarbons may be emitted.

Hazardous Products of Decomposition: Thermal Oxidative decomposition can produce carbon dioxide, various aliphatic hydrocarbons and hydrogen sulphide. Inhalation of these gases in closed systems can produce tissue hypoxia (insufficient oxygen).

Keep working area well ventilated when handling the hot bitumen.

Specific Fire Fighting Procedures: Since fires may produce toxic fumes, always wear a self-contained breathing apparatus (SCBA). Wear protective clothing and keep face and eye protected when handling hot bitumen.

Be aware of run off from fire control methods. Do not release into sewers or waterways since fire hazards may be created and cause pollution.

The flammability of bitumen is greatly influenced by the addition of petroleum solvents. This must be carefully noted.

4. Potential Hazards and First Aid

Exposure to hot bitumen fumes can cause skin, eye and mucous membrane irritation and burns. Due to the small amount of sulphur present, hydrogen sulphide gas may be given off in the hot fumes.

Acute Effects: Inhalation of the fumes can cause headaches, nausea, eye and respiratory tract irritation and nervousness.

Chronic Effects: Prolonged or repeated contact with the fumes may cause severe skin irritations.

First Aid:

Eyes – Gently lift eyelids and flush with copious amounts of water until transported to a medical facility. Seek Physician's assistance immediately. Have emergency eye wash stations available.

Skin – Quickly remove contaminated clothing. Immerse skin in cool water until material hardens on skin. Seek immediate medical attention. Do NOT remove hardened material before cooling.

Inhalation – Remove exposed persons to fresh air and support breathing with artificial respiration. Seek immediate medical attention.

Ingestion – Ingestion of cool bitumen is unlikely due to the nature of this product but the product is non-toxic.

5. Physiological Data

Carcinogenicity: 60/70 Penetration Bitumen is not listed as a carcinogen (OSHA or IARC). It is listed as A-4, non-toxic to human beings.

Carcinogenic components may be found in bitumen (and asphalt as a whole), but oxidation of the polycyclic aromatic hydrocarbons destroys their carcinogenic potential.

Diluting refinery bitumen with natural bitumens (asphalts) can reduce the former's carcinogenicity.

1989 OSHA - Permissible Exposure Limit (PEL) - none Established (NE)

1989 – 1990 - ACGIH TLV TLV -TWA: 5mg/m^3

6. Spills/Disposal Procedure

If spillages or leaks occur, remove all heat and ignition sources. Provide maximum ventilation. Cleanup personnel should wear protective clothing as appropriate and described above.

Small spills may be mopped up with sand or some other non-combustible, inert material and placed in containers appropriate for disposal compliant with the relevant law. Not listed as a hazardous waste by OSHA or SARA.