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# MATERIAL SAFETY DATA SHEET (M S D S)

#### 1. Product Identification

#### Product Name: 60/75 Asphalt Cement

<u>Origin</u>: Produced by blending refinery bitumen, a heavy oil residue from the refining of crude petroleum, with naturally occurring Trinidad Lake Asphalt.

<u>Other Names</u>: Trinidad Modified Asphalt (TMA), Trinidad Lake Asphalt Cement, Modified Asphalt, 60/70 Pen. Asphalt Cement.

<u>Composition</u>: Homogenous blend of 27-37% Trinidad Lake Asphalt and 63-73% Refinery Bitumen

#### Approximate Percentages of Components:

Bitumen Content	-	77 – 90%
Mineral Matter	-	7.5 – 19%
Water of Hydration of Minerals	-	1.2 – 1.6%
Other Organic matter	-	0.9 – 1.2%

# 2. Physical and Chemical Properties

<u>Appearance</u> :	A semi-solid, brown to black material		
Properties:	Penetration (25 °C)	- 60 - 75	
	Specific Gravity (25 °C)	- 1.10– 1.15g/cm <sup>3</sup>	
	Softening Point (R & B)	- 45 – 50°C	

### 3. Fire Protection

<u>Flash Point</u> :	(ASTM D92) (COC)	232 ºC (min)	
<u>Fire Point</u> :	(ASTM D92) (COC)	280 ºC (min)	
Extinguishing Media	Foam, dry chemical of spitting may result.	or carbon dioxide used to fight fire.	Do not use water,

#### 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.

#### Specific Fire Fighting Procedures:

Since fires may produce toxic fumes, always wear a self- contained breathing apparatus (SCBA). Wear suitable clothing for skin, face and eye protection when handling hot Asphalt Cement.

## 4. Potential Hazards and First Aid

High operational temperatures ( $160 - 170^{\circ}C$ ) cause hot material and flames/heater to be the greatest hazards. Suitable protective clothing, boots and eye protection should be worn during handling and processing

# **First Aid**: **Eyes** – Gently lift eyelids and flush with copious amount of water until transported to a medical facility. Seek Physician immediately. Make emergency eye wash stations available.

*Skin* – Quickly remove contaminated clothing. Immerse skin in cool water until material hardens on skin. Seek immediate medical attention. Medically approved solvents may be used to remove Asphalt Cement from the skin.

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

**Ingestion** – Ingestion of cool Asphalt Cement is relatively non-toxic.

# 5. Physiological Data

**Carcinogenicity**: 60/70 Asphalt Cement is not listed as a carcinogen (OSHA or IARC).

No long term effects are experienced with normal or extended exposure.

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

Good hygiene practices should be employed when handling Asphalt Cements. Use soap, warm water and approved solvents for washing contaminated areas.