



Material Safety Data Sheet

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Issued:	19 02 2001
Revised:	14 06 2008
Rev. No.:	5
Product:	MCO

COMPANY DETAILS:

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1) PRODUCT DETAILS:

Product name:	Mixed Creosote Oil
Chemical nature:	Complex mixture of hydrocarbons.
Synonyms:	MCO/GKO
UN/ SIN:	2810

2) COMPOSITION

Complex blend of liquid hydrocarbons. Polyaromatic hydrocarbons are primary components. Other components include tar acids, tar bases, naphthalene and anthrazine.

Dangerous Substances	% (m/m)	Risk Phrase
Tar Acids	20	Probable carcinogen, harmful, flammable
Mono-aromatics (C7,C8,C9 etc)	12	
Di-aromatics	23	
Naphthalene	6	
C2 Phenols	15	

3) HAZARDS IDENTIFICATION

Inflammable liquid; may be fatal if inhaled, harmful if swallowed or if absorbed through skin; contains probable carcinogen compounds, severe skin irritant.

4) FIRST AID MEASURES

	Symptom and Effect	First Aid
Skin	Prolonged and repeated contact with skin may cause severe irritation; Toxic if absorbed through the skin; potentially carcinogenic	Wash with soap and water until no odour remains.
Eyes	Contact with eyes may cause redness, tearing, blurred vision and moderate irritation.	Flush eyes with clean water for 15 minutes. Seek medical advice if irritation persists.
Ingestion	Harmful or fatal if swallowed. Ingestion of this product may cause central nervous system effects.	If victim is alert, give large amounts of water to drink and seek medical advice. Small amounts can be washed from mouth until no taste remains. DO NOT INDUCE VOMITING
Inhalation	Excessive exposure may cause respiratory tract irritation. Repeated prolonged exposure to high concentrations may lead to central nervous system effects, headaches, dizziness and loss of co-ordination.	Immediately remove to fresh air. Give oxygen if required. Seek medical advice if required.



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5) FIRE FIGHTING MEASURES	
SMALL FIRES: Use CO ₂ , foam or dry chemical.	
LARGE FIRES: Use CO ₂ , fluoro protein foam or dry chemicals to extinguish the fire. Use water to cool fire-exposed containers/ structures and to protect personnel. Combustion may release toxic chemicals; utilise respirators; avoid low lying areas.	
6) ACCIDENTAL RELEASE MEASURES	
Full protective clothing, rubber gloves (PVC, Neoprene, Nitrile, or Viton), gumboots and respirator to be worn. Shut off leaks. Remove all sources of heat or flame. Control spill by use of booms, sand, sawdust or any other suitable available medium. Recover as much free product as possible using pumps or mechanical means. Absorb residue with sawdust, sand or other absorbent material. Avoid the product entering storm water drains or waterways.	
7) HANDLING AND STORAGE	
Handling: Full protective clothing should be worn when handling the product. A high standard of personal hygiene is essential. Application of protective hand creams may be beneficial.	
Handling temperature: Avoid extreme temperatures	
Storage: Store away from strong oxidisers. Incompatible with sulphuric acid, nitric acid, caustics, aliphatic amines and amides.	
Storage Conditions: Storage conditions should comply with SANS Code 10131:2004 and SANS Code 10089:2003. Product should be stored in a well ventilated area. Sparks, flames and other sources of ignition near the product should be avoided. Do not eat, drink or smoke in storage area.	
8) EXPOSURE CONTROLS/ PERSONAL PROTECTION	
Occupational Exposure Limits:	OHSA 0.14 mg/m ³ TWA OEL-RL
Controls:	Store in accordance with SANS Code 10131:2004 or SANS Code 10089:2003
Personal Protection:	Ensure adequate tank ventilation If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment including overalls, impervious gloves, respirators, safety goggles, safety boots or gumboots.
9) PHYSICAL AND CHEMICAL PROPERTIES	
Black liquid with characteristic naphthalene odour. Low solubility in water.	
Density @ 15 ^o C, kg/l: 1.10	
Flashpoint @ 101, 325 kPa: > 65 ^o C, typical 120 ^o C	
Boiling Point: 170 ^o C	
Viscosity: ±18 cSt @ 100 ^o C	
Crystallisation Point: ± 50 ^o C	



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10) STABILITY AND REACTIVITY

Avoid strong oxidisers. Incompatible with sulphuric acid, nitric acid, caustics, aliphatic amines and amides.

11) TOXICOLOGICAL INFORMATION

Some components of the product are suspected carcinogens. Potentially harmful effects to liver, kidneys, heart, lungs and nervous system may result from chronic over exposure. Some of the components of the product have been associated with immunological, reproductive, fetotoxic and genotoxic effects.

12) ECOLOGICAL INFORMATION

No ecological problems are expected if the product is handled and used with due care. When released to the environment, some evaporation and bio-degradation will occur. Some components of the product are soluble in water and may contaminate groundwater reserves. Some components of the product will persist in soil. Material is moderately toxic to aquatic organisms.

13) DISPOSAL CONSIDERATIONS

Do not flush to drain/ storm sewer. Product must be disposed of in an approved hazardous waste disposal site or an approved incinerator.

14) TRANSPORT INFORMATION

UN/SIN	2810
ICS:	Class 6.1: Group III
Marine Pollutant:	Yes

15) REGULATORY INFORMATION

National Legislation	National Road Traffic Act 93 of 1996 Hazardous Substances Act 15 of 1973 Occupational Health and Safety Act 85 of 1993 Hazardous Chemical Substances Regulation GNR 1179
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16) OTHER INFORMATION

For more information please contact FFS Refiners' Customer Services Department on (031) 459 5300

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