



Material Safety Data Sheet

Page:	Page 1 of 3
Issued:	13 01 2005
Revised:	14 06 2008
Rev. No.:	5
Product:	LO20

COMPANY DETAILS:		
FFS Refiners (Pty) Ltd. 104 Umhlatuzana Road Sea View, Durban 4094 SOUTH AFRICA		Ph: 031 459 5300 Fax: 031 459 5326 Email: ffs@ffs.co.za
1) PRODUCT DETAILS:		
Product name:	Light Oil 20	
Chemical nature:	Liquid Hydrocarbons (C12 to C13)	
Synonyms:	LO20, Heavy Alcohol Ester, Wax Heavies	
UN no./ SIN:	1268	
2) COMPOSITION		
C12-C13 higher alcohols (44%), Waxy Esters (50%), Dimers (6%)		
Dangerous Substances	% (m/m)	Risk Phrase
Aromatics	<3	Carcinogen
3) HAZARDS IDENTIFICATION		
Inflammable liquid; may be fatal if inhaled; harmful if swallowed or if absorbed through skin; contains probable carcinogen compounds.		
4) FIRST AID MEASURES		
	Symptom and Effect	First Aid
Skin	Irritating to the skin, but not corrosive. Product is slightly toxic and may be harmful if absorbed through the skin. May cause slight scaliness and swelling on contact with skin.	Remove contaminated clothing. Wash affected areas well with mild soap and water. Obtain medical assistance as soon as possible.
Eyes	May cause slight irritation to the eyes, and may cause slight redness of the conjunctiva with exposure to the substance.	Flush eyes thoroughly with water for at least 15 minutes while holding eyelid open. Call a physician.
Ingestion	Non-toxic by ingestion but may be harmful at high concentrations. High doses may lead to headache, dizziness and nausea.	Do not induce vomiting. If vomiting occurs keep head below hips to prevent aspiration of liquid into the lungs. Consult a physician.
Inhalation	In the unlikely event that the product can be inhaled, (IBP 280 °C) it will be harmful by inhalation. Irritation to nose, throat and respiratory tract.	Move victim to fresh air away from further exposure and apply artificial respiration if breathing has stopped, or oxygen if breathing is irregular. Call physician immediately.
5) FIRE FIGHTING MEASURES		
Extinguishing media: Alcohol-resistant foam, dry chemical powder, foam or carbon dioxide.		
Special procedures: Use water to cool fire-exposed containers that are still sealed. Water may be ineffective as burning liquid may float. Do not spray pool fires directly.		
Protective clothing: Wear MSHA / NIOSH-approved self-containing breathing apparatus or equivalent and full protective gear.		



Material Safety Data Sheet

Page:	Page 2 of 3
Issued:	13 01 2005
Revised:	14 06 2008
Rev. No.:	5
Product:	LO20

6) ACCIDENTAL RELEASE MEASURES	
Personal precautions: Extinguish any naked flames. Keep away from sources of ignition. Evacuate personnel from the area. Avoid inhaling the fumes.	
Environmental: Do not allow product or run off from fire control to enter storm or sanitary sewers, lakes or rivers. Block off drains and ditches. Spill area should be cleaned and restored to original condition. Notify appropriate environmental agencies.	
Spillages/leaks: Wear appropriate breathing apparatus and protective clothing. Stop leak only if safe to do so. If not ignited, ventilate the area and cover with foam.	
Methods for clearing: Absorb residue with inert absorbent materials such as clay or sand and remove to non-leaking containers for disposal.	
7) HANDLING AND STORAGE	
Handling: Avoid excessive heat and sources of ignition. Ensure good ventilation. Do not breathe gas, fumes, vapour or spray. If ingested, seek medical help immediately. Material is very slippery.	
Technical measures: Store in accordance with all national, regional and local regulations. All engineering controls must be activated before handling.	
Storage Conditions: Store in a cool, well-ventilated area away from open flames and high temperatures. Have appropriate fire extinguishers and spill clean-up equipment in the storage area.	
8) EXPOSURE CONTROLS/ PERSONAL PROTECTION	
Occupational Exposure Limits:	OHSA 16 mg/m ³ TWA OEL-CL
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	
Light oil with characteristic citrus odour. Pour Point: 12-18 °C Density @ 40 °C: 0,85 kg/l Flashpoint: 148-155 °C (closed cup) Boiling Point: 280-316 °C Viscosity (cSt) @ 50 °C: 10-30cSt Solubility in water: Low	
10) STABILITY AND REACTIVITY	
Stability: Product stable. Conditions to avoid: High temperatures. Materials to avoid: Aluminium at high temperature, strong oxidising agents, Lewis acids or base.	



Material Safety Data Sheet

Page:	Page 3 of 3
Issued:	13 01 2005
Revised:	14 06 2008
Rev. No.:	5
Product:	LO20

Hazardous combustion/ decomposition products: Carbon dioxide, carbon monoxide, water and unidentified organic compounds may form during combustion.
Incompatibility: Oxidising agents, alumina.

11) TOXICOLOGICAL INFORMATION

Oral toxicity: LD50 > 2000 mg/kg (rat)
Dermal toxicity: LD50 > 2000 mg/kg (rabbit)
Chronic effects on humans: Prolonged exposure to skin can cause defatting and drying of the skin resulting in irritation and dermatitis.
Other toxic effects on humans: Slightly hazardous in case of skin contact (irritant).

12) ECOLOGICAL INFORMATION

Mobility: Floats on water. Absorbs to soil and is immobilised.
Persistence/degradability: 72% in 28 days
Bio-accumulation: Not likely due to metabolism and excretion
Ecotoxicity: EC50 (B. rerio) > 100ppm, EC50 (Bacteria) > 1003ppm

13) DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, regional or national regulations.
Contaminated waste or packaging should either be recycled or otherwise destroyed by incineration. If appropriate, disposal can be by discharge to a licensed waste disposal facility. Do not attempt to combust waste on site.

14) TRANSPORT INFORMATION

UN no./ SIN	1268
ICS:	Class 3: Group III
IMDG Code:	Class 3
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
----------------------	---

16) OTHER INFORMATION

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

THE INFORMATION CONTAINED HEREIN, WHILST APPROPRIATE, IS GENERAL IN NATURE. The information contained herein is also an amalgamation of Good Laboratory Practice-accredited (GLP), in-house derived as well as from published and industry-published data. The data is presented in good faith and is to the best of FFS Refiners (Pty) Ltd's knowledge true and accurate. It is presented for information purposes only and without any warranty whatsoever. Due to the special nature of the product and its applications, FFS Refiners (Pty) Ltd does not accept any responsibility or liability whatsoever (including patent infringement) which may result from the use of this information. If in doubt please contact FFS Refiners (Pty) Ltd.

The information contained herein is not to be construed as any licence to operate under, or a recommendation to infringe any existing patents, nor should it be seen as taking preference over any Governmental or international safety codes or regulations.