



PERTAMINA Material Safety Data Sheet

1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Name : Smoth Fluid - 05
Tradenames and Synonyms : Oil Base Mud / Drilling Fluid.
MSDS Code : OBM -005-PTM
Date : Januari 23, 2015 Revised:2
Manufacturer : PERTAMINA, RU - V Refinery, Balikpapan Indonesia
Distributor : PERTAMINA, Niaga Special Chemical & Bio Fuel
Jln Merdeka Timur 1A Jakarta 10010 Indonesia
Phone : 62-21-3815707
Fax : 62-21-3812573
Product Information : PERTAMINA, Product & Process Development
Phone : 62-21-4605088
Fax : 62-21-46836856
Medical Emergency : 62-21-3815964

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	%vol
1. Heavy hydrocrackerd	64741-76-0	> 90

3. HAZARDS IDENTIFICATION

Main hazards :

Harmful effects on health : May cause lung damage if swallowed
Effect on the environment : This product must be essentially harmiess for aquatic and land-based life and would be intrinsically biodegradable
Physico-chemical hazards : No Special risk of inflammation or explosion
Classification or products : Harmful

4. FIRST AID MEASURES

First Aid

INHALATION : Take the person into the fresh air.
SKIN CONTACT : Rinse off with water and remove contaminated clothing.

EYE CONTACT	: Promptly wash with water for at least 15 mm.
INGESTION	: Do not Induce vomiting, to prevent aspiration into the respiratory tract. Seek medical advice.
Aspiration	: If aspiration into the lungs may have occurred (during vomiting for example) take the person to hospital as soon as possible.
Main Symptoms	: in the event inhalation : - irritation of respiratory tracts at higher concentrations : - narcosis in the event splashing into the eye : - burning sensations - temporary readness in the event of ingestions : - nausea - vomiting - abdominal pain In the event of repeated or prolonged contact with the skin : - dryness - chapping and irritation in the event of ingestion with bronchial inhalation : - pneumonopathy with respiratory distress

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point	: See section "Physical and chemical properties".
Methods of extinguishing :	
Appropriate measures	: Foam, CO2, powder
- not recommended	: Water jets.
Specific hazards	: Incomplete combustion and thermolysis produce gases of varying toxicity such as CO, CO2, various hydrocarbons, aldehydes, etc. and soot. Inhalation of these is very dangerous.
Special methods of action	: Use atomized water to cool containers exposed to fire. Take precautionary measures against static discharges which could be produced during mixing and transfer operations.
Protection for fire – fighters	: Mandatory wearing of breathing equipment due to high proportion of

hazardous fumes and gases.

Explosive limit in air ambient temperature, in volume of vapour or mist : 1 at 6 %.

6. ACCIDENTAL RELEASE MEASURES

Individual precautions	:	Depending on the risk of exposure, wear gloves, goggles, and protective clothing.
Environmental protection Precautions	:	Design the installation and take all the measures necessary to avoid water and soil pollution : Containment, absorbent materials, etc.
Methods of cleaning	:	
Recovery	:	Dam and then recover with the aid of physical resources.
Disposal	:	Send contaminated materials to an approved collection facility. Wash ground with plenty of water.
Prevention of secondary risk:	:	Eliminate possible sources of ignition.
Spill or Leak Procedure	:	Use appropriate personal protective equipment during clean up. Prevent material from entering sewers, waterways/low areas. Soak up with sawdust, sand, or other absorbent material. Collect and place in an appropriate disposal container.

7. HANDLING AND STORAGE

Handling

- Technical measures :
 - Prevention of worker exposure : Ensure adequate ventilation is provided if there is any risk of vapours, mists, or aerosols forming.
 - Prevention of fires and explosions : Make provision for water to avoid any spread of fire.
 - Precautions : Do not inhale vapours, fumes, or mists
Prolonged and repeated contact with the skin may cause skin disorders.
 - Advice for utilization : Do not spray at high pressure (> 3 bar).

Storage

- Technical measures :
 - Keep well away from sources of heat. Avoid the accumulation of static electricity. Provide earthing.
 - Use only receptacles, joints, pipes etc. which are resistant to hydrocarbons.
- Storage conditions : recommended :
 - Recommended packing material : original one
 - Keep containers closed when not in use.
- Packaging Material : recommended :
 - Iron

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Technical measures : Use the product in a well-ventilated atmosphere with flameproof materials.

- monitoring parameters :

- occupational exposure limit United States :
- mineral oil mist:
TLV-TWA : 5 mg/m³

Vapour pressure (HYSIM) at 20 ° 0 mbar

Vapour pressure (HYSIM) at 80 ° 0 mbar

Personal Protective Equipment

RESPIRATORY PROTECTION : Wear appropriate breathing equipment if exposure levels exceed the limit values

PROTECTION FOR THE HAND : Use impermeable paraffins resistant gloves

PROTECTION FOR THE EYES : Wear goggles in the event of the risk of emissions

PROTECTION FOR SKIN : Appropriate protective clothing

Hygiene measures : Avoid prolonged and repeated contact with the skin.
Do not wipe hands with contaminated rags.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance :

- physical state at 20 ° C : Liquid
- colour ASTM : Max 1.5
- odour : None.

Specific temperature for change of physical state :

Flash point, ° C : Min 75
Density at 15 °C, Kg/L : **0.800 – 0.835**
Pour Point, ° C : Max 5
Aniline Point, ° C : Min 80
Kadar Aromatic (B,T,X) % wt : Max 0,05
Viscosity Kinematic at 40 ° C,cSt : 2.5 – 3.5

10. STABILITY AND REACTIVITY

Chemical Stability	: Product stable at conventional temperature for storage , handling, and use
Dangerous reactions	: None to our knowledge
Substitution to be avoided	: Avoid powerful acids and oxidizing agents.
Danger decomposition product	: Incomplete combustion produces toxic gases, such as CO, CO ₂ , various form of hydrocarbons, aldehydes, etc. and soots. Inhalations is extremely dangerous.

11. TOXICOLOGICAL DATA

Acute toxicity :	
- Contact with the skin	LD 50 : By analogy : unclassified
Ingestion :	In case of accidental ingestion, the product may be breathed into the lungs owing to its low viscosity and give rise to an inhalation pneumopathy developing in the hours which follow (medical supervision essential for 48 hours (*)).
Local effects :	
- contact with the skin :	OECD GL 404 : non irritating. No classification
- contact with the eyes :	OECD GL 405 : non irritating. No classification
Chronic long-term toxicity :	
Contact with the skin :	Frequent or prolonged with the skin destroys the cutaneous lipoprotein film and can cause dermatitis.

12. ECOLOGICAL DATA

Mobility :	Soil : In consideration of its physical and chemical characteristics, the product has only slight mobility in the soil. Water : solubility < 1 mg/l.
Aquatic toxicity :	Sheen test (ENSR h Houston-USA) April 1997 : pass Amphipod Corophium Volutator – ASTM/USEPA - EC 50 / 8 H : 1211 mg/kg- JUNE 96. LC 24 – 48 H Peneaus Monodon > 100 mg/ml.
Biodegradability	OECD 306 - % 28 days : 76.5 % - JUNE 96 Biodegradable in seawater.

13. CONSIDERATION RELATING TO ELIMINATION

Surplus or wastes :	Do not discharge into the sewerage systems or natural environment.
- methods relating to elimination :	The only method of elimination authorized in the United Kingdom is recovery by a Special Waste Contractor, with recycling or incineration in an approved facility.
- Contaminated packaging :	

- methods relating to elimination : Send to an approbed Waste Colector
- Local provisions : Comply with the current regulation and decreas.

14. DATA RELATING TO TRANSPORT

International regulations :

UN No. :	Not applicable
Transport by land :	
RID/ADR :	Not aplicable
By sea :	
IMDG	Not applicable
By air :	
OACI/IATA	Not applicable

15. REGULATORY DATA

Community regulations

FC labeling :

Hazard symbols	Xn-Harmful (*)
- phrases	R65 : Harmful : may cause lung damage if swallowed. (*)
- phrases	S 62 : if swallowed do not induce vomiting : seed medical advice immediately and show this container or label. (*)

16. OTHER INFORMATION

This safety data sheet complies with the recommendations of the European Community and French regulations.
Contact your local branch for adaptation to specific national requirements.

This dossier supplements the technical notifications for use, but not replace them. The information which it contains is based on out knowledge relating to the product in question on the date indicated. The information dossier does not, under any circumstances, discharge the user from the obligation of being aware of , and of applying, all the texts which govern his sphere of activity. He shall be solely responsible for taking the precautions associated with the use which he makes of the product.

All the statutory provisions referred to are intended simply to assist the recipient in fulfilling the obligations encumbent upon him. This enumeration must not be considered to be exhaustive.

The recipient must ensure that no obligations are encumbent upon him. As a result of texts other than those cited, relating to the holding and handling of the product, for which he alone is responsible.

The data in this Material Safety Data Sheet relates only to the specific material designated here in and does not relate to use in combination with any other material or in any process.