



FRANCIS DRILLING FLUIDS, LTD.

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Trade Name(s): FDF EML-II	
Generic Name(s): Drilling Mud Additives	
Chemical Name(s): Proprietary Mixture	
Francis Drilling Fluids, LTD. P.O. Box 1694 Crowley, LA 70527-1694	Emergency/Telephone No.: 800-960-6610 337-783-8685 Hazardous Materials No.: 800-255-3924 Poison Control Center No.: 800-256-9822

II. HAZARDOUS INGREDIENTS

Ingredient	CAS No.	%	
Distillate	67891-79-6	Conf.	ND
Xylene	1330-20-7	2.5	OSHA(TWA) 100ppm, ACGIH 100ppm, STEL 150ppm
Cumene	98-82-8	1	ACGIH(Skin) 50ppm
Naphthalene	91-20-3	1	ACGIH 10ppm(TWA), 15ppm STEL
Ethylbenzene	100-41-4	7.5	OSHA 100ppm, ACGIH 100ppm(TWA), 125ppm STEL
Xylene	1330-20-7	2.5	OSHA (TWA) PEL 100ppm, ACGIH 100ppm, ACGIH STEL 150ppm
Cumene	98-82-8	<1	OSHA (PEL) 50ppm, ACGIH (TWA) 50ppm
Trimethylbenzene	25551-13-7	2.4	OSHA(TWA) 25ppm, ACGIH (TWA) 25ppm
Methyl Alcohol	67-56-1	3	OHS(A) (TWA) PEL 200ppm, ACGIH (TWA) 200ppm, ACGIH STEL 250ppm

III. NFPA/HMIS HAZARD IDENTIFICATION SYSTEM

0=LEAST	1=SLIGHT	2=MODERATE	3=HIGH	4 =EXTREME
Health: 2				
Fire: 2				
Reactivity: 0				

IV. PHYSICAL DATA

Boiling Point (°F): ND	Specific Gravity (H ₂ O=1): 1.03
Vapor Pressure (mm. Hg): 1.0	Melting Point: ND
Vapor Density (Air = 1): 29.92	Evaporation Rate: ND
Solubility in Water: Insoluble	pH: ND
Density (at 20° C): ND	Odor: Aromatic
Appearance: Thick black liquid	

V. FIRE AND EXPLOSION DATA

Flash Point: <100°F	Flammable Limits: LEL: ND UEL: ND
Special Fire Fighting Procedures: Self-contained breathing apparatus and protective clothing. Keep unnecessary people away.	
Unusual Fire and Explosion Hazards: Containers may explode from internal pressure if confined to fire. Cool with water.	
Extinguishing Media: Water spray or fog, foam, dry powder, carbon dioxide (CO ₂).	

VI. REACTIVITY

Stability: Stable , but avoid open flames, sparks.
Hazardous Polymerization: No polymerization.
Incompatibility: Strong oxidizers or oxidizing materials..
Hazardous Decomposition: Combustion may produce oxides of carbon and smoke.

VII. HEALTH HAZARD INFORMATION

Routes of Exposure and Effects:		
Skin: Skin irritation develops slowly after contact.		
Eyes: Eye irritation develops immediately upon contact.		
Inhalation: Acute inhalation of vapors may be narcotic or anesthetic. Overexposure effects are irritation of respiratory tract, nervous system depression, headaches, dizziness, staggering gait, confusion, unconsciousness, coma.		
Ingestion: Ingestion of liquid will cause gastrointestinal distress, irritation and possibly nausea.		
Permissible Exposure Limits: (for air contaminants)		
OSHA PEL (8hr. TWA): *See Hazardous ingredients data		
ACGIH TLV: *See Hazardous ingredients data		
Carcinogenicity:		
Listed By NTP: Yes	Listed By: IARC: Possible-Human evidence. Inadequate	Listed By OSHA: Not listed
Acute Oral LD50:	Acute Dermal LD50:	Aquatic Toxicology LC50:
Emergency and First Aid Procedures:		

Skin: Wash with soap and water. Call a physician if irritation develops.

Eyes: Flush immediately with large amounts of water for at least 15 minutes and call a physician.

Ingestion: Harmful or fatal if swallowed. Do not induce vomiting, seek medical assistance immediately.

Inhalation: If affected remove to fresh air. If not breathing, give artificial respiration.

Additional Health Hazard Information::

Remove all contaminated clothing and launder before rewearing.

VIII. HANDLING AND USE PRECAUTIONS

Steps to be Taken if Material is Released or Spilled: Absorb with inert material and place in D.O.T. approved container for disposal in accordance with local, state and federal regulations. Remove all sources of flame or heat.

Waste Disposal Methods: Hazardous Waste. Contact an EPA or State Approved Disposal Facility.

Handling and Storage Precautions: Keep containers tightly closed, store in cool, dry place. Keep away from ignition sources. Store away from caustic or alkaline materials. Store away from oxidizers or materials bearing a yellow "DOT" label.

IX. INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements: Local exhaust or mechanical exhaust.

Respirator: NIOSH approved organic vapor mask. Use SCBA when entering tanks.

Eye Protection: Safety glasses. Use goggles or face shield if splashing is likely.

Gloves: Chemically resistant/non-slip.

Other Protective Clothing or Equipment: Coveralls, splash aprons, eye wash, and safety shower.

X. SPECIAL PRECAUTIONS

Clean up spills promptly, wash contaminated clothing. Keep away from heat, sparks and flame. Use only in an area well ventilated by moving air. Keep flow of fresh air until all vapors(odors) are gone. Avoid contact with skin, eyes, and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs remove contaminated clothing.

XI. ENVIRONMENTAL/SAFETY REGULATION

This document is prepared pursuant to the OSHA Hazardous Communication Standard (29 CFR 1910.1200).

EPA Acute.....Yes
EPA Chronic.....Yes
EPA Ignitability.....Yes
EPA Reactivity.....Yes
EPA Sudden Release of Pressure.....No
CERCLA RQ Value.....10,000 lbs. based on Naphthalene content in blend
SARA TPQ.....None
SARA RQ.....10,000 lbs. based on Naphthalene content in blend
Section 313.....Yes - Xylene, Cumene, Naphthalene, Ethyl Benzene, Trimethylbenzene, Methanol

DEPARTMENT OF TRANSPORTATION

Shipping Name: Flammable liquid, N.O.S., UN1993,
PGII

Hazard Class: 3

Hazardous Substance: RQ 10,000 lbs.

Cautionary Labeling: Flammable

Placard: UN1993

NA=Not Applicable; ND=Not Determined or No Data

Date Prepared: July 27, 1995

File Name: FDFEML-II

The data presented is true and correct to the best of our knowledge and belief; however, neither seller nor preparer make any warranties, express or implied, concerning the information presented. The user is cautioned to perform his own hazard evaluation and to rely upon his own determinations.