



# FRANCIS DRILLING FLUIDS, LTD.

## MATERIAL SAFETY DATA SHEET

### I. PRODUCT IDENTIFICATION

Trade Name(s): Claytone-IMG 400

Generic Name(s):

Chemical Name(s): Alkyl Quaternary Ammonium Montmorillonite Cas Number 68953-58-2

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.	%	Hazard
Quartz	14808-60-7	< 0.4	

### III. NFPA/HMIS HAZARD IDENTIFICATION SYSTEM

0=LEAST                      1=SLIGHT                      2=MODERATE                      3=HIGH                      4 =EXTREME

Health: 1

Fire: 0

Reactivity: 0

### IV. PHYSICAL DATA

Boiling Point (°F): NA	Specific Gravity (H <sub>2</sub> O=1): 1.5 - 1.7
Vapor Pressure (mm. Hg): NA	Melting Point: ND
Vapor Density (Air = 1): NA	Evaporation Rate: NA
Solubility in Water: Negligible	pH: NA
Density (at 20° C):	Odor: Mild odor
Appearance: Tan powder	

### V. FIRE AND EXPLOSION DATA

Flash Point: None under normal handling conditions. Conditions of flammability: Dust clouds (greater than 0.05 oz./ ft <sup>3</sup> .) may ignite at 470°C. Thin film ignition temperature is 190°C.	Flammable Limits:            LEL: NA            UEL: NA
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Special Fire Fighting Procedures: Normal precautions for organic dusts should be followed.

Unusual Fire and Explosion Hazards: NA

Extinguishing Media: Water fog, foam, dry chemical.

## VI. REACTIVITY

Stability: Stable

Hazardous Polymerization: ND

Incompatibility: None

Hazardous Decomposition: Incomplete combustion may produce carbon monoxide and small amounts of various combustion products of nitrogen.

## VII. HEALTH HAZARD INFORMATION

Routes of Exposure and Effects:

Skin: ND

Eyes: ND

Inhalation: Chronic exposure to any dust may cause respiratory problems.

Ingestion: ND

Permissible Exposure Limits: (for air contaminants)

OSHA PEL (8hr. TWA): 10.0mg/m<sup>3</sup> respirable dust

ACGIH TVL: 10.0mg/m<sup>3</sup> respirable dust

Carcinogenicity:

Listed By NTP: Not listed

Listed By: IARC: Not listed

Listed By OSHA: Not listed

Acute Oral LD50:

Acute Dermal LD50:

Aquatic Toxicology LC50:

Emergency and First Aid Procedures:

Skin: Wash off with soap and water.

Eyes: Flush with water.

Ingestion: Call a physician as soon as possible.

Inhalation: Remove to fresh air.

Additional Health Hazard Information::

The International Agency for Research on Cancer has determined limited evidence of the carcinogenicity of crystalline silica to humans.

## VIII. HANDLING AND USE PRECAUTIONS

Steps to be Taken if Material is Released or Spilled: Spilled powder may be collected by shoveling or sweeping while using recommended personal protective equipment. Care should be taken to prevent high dust concentrations in the air.

Waste Disposal Methods: Solid waste disposal. Not suitable for incineration, chemical or biological degradation.

Handling and Storage Precautions: Precaution for finely divided organic dusts should be followed. Avoid high dust concentrations. Insure all equipment is properly grounded to prevent static discharge. Keep dust away from open flames,

sparks, etc. Store in closed containers.

### IX. INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements: Adequate ventilation or dust collection system is to be provided to decrease combustion hazard and maintain dust level below ACGIH-TWA exposure limits.

Respirator: Approved dust respirator.

Eye Protection: Safety glasses or goggles.

Gloves: Not required.

Other Protective Clothing or Equipment: Not required.

### X. SPECIAL PRECAUTIONS

### XI. ENVIRONMENTAL/SAFETY REGULATION

#### DEPARTMENT OF TRANSPORTATION

Shipping Name: ND

Hazard Class: ND

Hazardous Substance: ND

Cautionary Labeling: ND

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

Date Prepared: August 11, 1995

File Name: Claytone

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.