

MATERIAL SAFETY DATA SHEET

Product Name: LW-200

Anchor Drilling Fluids USA, Inc.
2431 E 61ST Street, Suite 710, Tulsa, OK 74136

Run Date: 1/15/99

Rev. Date: 05/01/06

I. GENERAL INFORMATION

Chemical Name: LW-200 CAS#: N/A
Chemical Family: BLEND OF TOSCA REPORTED SUBSTANCES
Chemical Formula: PROPRIETARY
Synonyms:
NFPA Properties: Health: 2 Flammability: 2 Reactivity: 0
Emergency Telephone: CHEMTREC (800) 424-9300 Information Telephone: (918) 583-7701

II. HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous Components	TWAPPM	TWA MG/M ³	STEL PPM	STEL MG/M ³	CAS#	OTHER LIMITS	%
1. PHYSICAL HAZARDS: CAUTION!!! COMBUSTIBLE LIQUID.							
2. ACUTE HEALTH EFFECTS: DANGER!!! INGESTION HAZARD, MODERATE EYE IRRITANT, MODERATE INHALATION HAZARD AND MODERATE SKIN IRRITANT.							
3. CHRONIC HEALTH EFFECT: NONE KNOWN.							

III. PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point °F:	215°F	Color:	LIGHT AMBER
Specific Gravity:	.99 – 1.02	Odor:	ALCOHOLIC
Vapor Pressure:	N/A	Appearance:	LIQUID
Percent Volatility:	APPRECIABLE	pH:	NDA
Vapor Density:	N/A	Viscosity:	NDA
Evaporation Rate:	NDA	Activity:	NDA
Solubility in Water:	COMPLETE	LC50:	NDA
Melting Point °F:	NDA	LD50:	NDA

IV. FIRE & EXPLOSION HAZARD DATA

Extinguishing Agents: DRY CHEMICAL, ALCOHOL TYPE FOAM, CARBON DIOXIDE
Flash Point °F:
Flammable Limits: LEL: NDA UEL: NDA
Special Firefighting Procedures: DO NOT ENTER ANY ENCLOSED OR CONFINED FIRE AREA WITHOUT PROPER PROTECTIVE EQUIPMENT, SUCH AS SELF-CONTAINED BREATHING APPARATUS.
Unusual Fire & Explosion Hazards: COMBUSTIBLE LIQUID. WHEN HEATED ABOVE FLASH POINT, IT RELEASES COMBUSTIBLE VAPORS WHICH WHEN MIXED WITH AIR CAN BURN OR BE EXPLOSIVE.

MATERIAL SAFETY DATA SHEET

Product Name: LW-200

Anchor Drilling Fluids USA, Inc.
2431 E 61ST Street, Suite 710, Tulsa, OK 74136

Run Date: 1/15/99

Rev. Date: 05/01/06

V. HEALTH HAZARD DATA

Routes of Entry: Inhalation – YES Skin – YES Ingestion – YES

Effects of Overexposure: PROLONGED EXPOSURE TO EXCESS CONCENTRATIONS OF THIS MATERIAL MAY CAUSE SIGNS AND SYMPTOMS OF CENTRAL NERVOUS SYSTEM DEPRESSION, SUCH AS HEADACHE, DIZZINESS, LOSS OF APPETITE, WEAKNESS AND LOSS OF COORDINATION. ON DIRECT OR VAPOR CONTACT, MILD BURNING, TEARING OR REDNESS CAN OCCUR. DRUNKENNESS, NAUSEA, VOMITING, SEVERE STOMACH PAIN, DIMMED VISION PROGRESSING TO BLINDNESS AND WEAKNESS, PROGRESSING TO COMA CAN OCCUR IF INGESTED. EFFECTS SIMILAR TO INGESTION CAN OCCUR THROUGH SKIN ABSORPTION, ESPECIALLY TO INFANTS.

Toxicological Properties: NDA

Chronic & Acute Effects of Overexposure: NONE KNOWN.

Carcinogenicity: NTP – NDA IARC Monographs – NDA OSHA Regulated – NDA

Emergency First Aid Procedures:

- Eyes: FLUSH EYES WITH LOW-PRESSURE WATER FOR AT LEAST 15 MINUTES AND OBTAIN MEDICAL ATTENTION IMMEDIATELY. PROMPT ACTION IS ESSENTIAL.
- Skin Contact: WASH AFFECTED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING, INCLUDING SHOES AND CLEAN THOROUGHLY BEFORE REUSE. SEE IMMEDIATE MEDICAL ATTENTION.
- Inhalation: IF OVERCOME BY EXPOSURE, REMOVE VICTIM TO FRESH AIR IMMEDIATELY. OBTAIN EMERGENCY MEDICAL ATTENTION. KEEP INDIVIDUAL QUIET. IN THE EVENT OF RESPIRATORY DISTRESS, GIVE OXYGEN OR ARTIFICIAL RESPIRATION.
- Ingestion: GASTRIC LAVAGE PREFERRED. INDUCE VOMITING ONLY IF VICTIM IS CONSCIOUS. OBTAIN MEDICAL ATTENTION IMMEDIATELY. PROMPT ACTION IS ESSENTIAL.

VI. REACTIVITY DATA

Stability: STABLE Hazardous Polymerization: NOT EXPECTED

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF NITROGEN & SULFUR

Conditions To Avoid: HEAT, SPARKS OR OPEN FLAME.

Incompatibility and Materials to Avoid: STRONG OXIDIZING AGENTS.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

<u>Steps To Be Taken In Case Material Is Released Or Spilled – Procedures For Clean-Up:</u>	COMBUSTIBLE LIQUID RELEASE CAN CAUSE FIRE OR EXPLOSION HAZARD. USE ABSORBENT MATERIAL SUCH AS CLAY OR DIATOMACEOUS EARTH TO CLEAN UP SPILL.
<u>Waste Disposal Method:</u>	CONTAMINATED MATERIAL MUST BE TRANSPORTED IN A DOT APPROVED DRUM OR BULK CONTAINER. AS APPROVED HAZARDOUS WASTE TRANSPORTATION COMPANY MUST TRANSPORT WASTE. THIS WASTE MUST BE DISPOSED OF IN A CLASS 1 SECURE SANITARY

MATERIAL SAFETY DATA SHEET

Product Name: LW-200

Anchor Drilling Fluids USA, Inc.
2431 E 61ST Street, Suite 710, Tulsa, OK 74136

Run Date: 1/15/99

Rev. Date: 05/01/06

	LANDFILL OR APPROVED INCINERATOR. DO NOT CONTAMINATE WATER WITH WASTES OR WITH WASTE EFFLUENT FROM CLEANING EQUIPMENT.
<u>Precautions To Be Taken In Handling & Storage:</u>	COMBUSTIBLE. KEEP CONTAINER CLOSED WHEN NOT IN USE. STORE AWAY FROM HEAT, SPARKS OR OPEN FLAME. KEEP OUT OF THE REACH OF CHILDREN.
<u>Decontamination Procedures:</u>	CONTAINERS SHOULD BE DECONTAMINATED AND ALL RESIDUAL CONTENTS REMOVED BEFORE DISPOSAL. ALL ELECTRICAL EQUIPMENT IN AREAS WHERE MATERIAL IS STORED AND/OR HANDLED SHOULD MEET NATIONAL ELECTRICAL CODE N.F.P.A. 30 CLASS 1 GROUP D.

VIII. CONTROL MEASURES

Ventilation Type Required: LOCAL EXHAUST VENTILATION MAY BE REQUIRED TO MEET EXPOSURE STANDARDS IN GENERAL ROOM VENTILATION.

Protective Gloves: RECOMMENDED.

Eye Protection: CHEMICAL SPLASH GOGGLES AND FACE SHIELD MUST BE WORN WHEN SPLASHING, SPRAYING OR OTHER CONTACT IS POSSIBLE.

Respiratory Protection: WHEN EXPOSURE ABOVE THE ESTABLISHED STANDARD IS LIKELY, A RESPIRATORY PROTECTION PROGRAM WHICH COMPLIES WITH OSHA SEC 51-44 AND RESPIRATORY EQUIPMENT APPROVED BY NIOSH SHOULD BE IMPLEMENTED

Other Protective Equipment: AVOID PROLONGED OR REPEATED SKIN CONTACT. USE GOOD PERSONAL HYGIENE.

Other Hygienic Practices: EMERGENCY EYE WASH FOUNTAINS AND SAFETY SHOWERS SHOULD BE AVAILABLE IN THE IMMEDIATE VICINITY OF ANY POTENTIAL EXPOSURE.

IX. REGULATORY & TRANSPORTATION INFORMATION

US DOT Proper Shipping Name: "LW-200"

US DOT Hazard Class: DOT ID Number: N/A

ID Number: Freight Classification: N/A

Unregulated by DOT: NOT REGULATED Regulated by DOT: N/A

Special Transportation Note:

Labels Required:

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any damage or expense.