

Mineral Oil Invert 80/20 IEF

MATERIAL SAFETY DATA SHEET

SECTION I: IDENTIFICATION OF PRODUCT

COMPANY: Prairie Mud Services DATE: November 20, 2014

738 6th Street PHONE: 306-634-3411 Estevan, SK Canada FAX: 306-634-7310

PRODUCT NAME: MINERAL OIL INVERT

80/20 IEF

PRODUCT USE: Drilling fluid

CHEMICAL FAMILY: Organic hydrocarbon & water CAS #: Mixture

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: Not WHMIS controlled WORKPLACE HAZARD: None known.

TRANSPORTATION OF DANGEROUS GOODS (TDG)

PROPER SHIPPING NAME: Not regulated under TDG

TDG CLASSIFICATION: Not applicable UN NUMBER (PIN): Not applicable PACKING GROUP: Not applicable

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT% (w/w) CAS NUMBERLD50Oral-Rat LC50 Inhal-Rat LC50 Inhal-Rat LC50 Inhal-Rat Number LD50Oral-Rat LC50 Inhal-Rat LC50 Inhal-Rat Number LD50Oral-Rat Number LD50Oral-Rat LC50 Inhal-Rat Number LD50Oral-Rat LC50 Inhal-Rat Number LD50Oral-Rat Number LD50

SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY: [XX] EYE CONTACT [XX] SKIN [XX] INHALATION [XX] INGESTION

EYE CONTACT: May cause slight irritation.

SKIN CONTACT: May cause slight irritation. Prolonged or repeated exposure may cause dermatitis.

INGESTION: May cause laxative effect.

INHALATION: Vapours or mists may cause respiratory

tract irritation. Prolonged exposure to high vapour concentration can cause headache, dizziness, nausea, blurred vision and central nervous system depression. Aspiration of product during swallowing or vomiting may cause chemical pneumonitis and/or

pulmonary edema.

CARCINOGENICITY: Not known to contain any chemicals at reportable quantities that are listed: As

Group A1 or A2 carcinogens by ACGIH; Group 1, 2A or 2B carcinogens by IARC; by NTP; by IRIS; or, by OSHA. TERATOGENICITY: Not expected to

be teratogenic based on available information.

REPRODUCTIVE

TOXICITY: Not expected to be a reproductive toxin based on available information.

MUTAGENICITY: Not expected to be mutagenic based on available information.

SYNERGISTIC

PRODUCTS: No information available.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT: Immediately wash thoroughly with water while removing contaminated clothing.

If irritation develops, obtain medical attention.

Immediately flush with gently flowing warm water for 15 minutes or until irritation ceases. When flushing is complete, obtain medical attention.

INGESTION: Do not induce vomiting or give liquids. Obtain immediate medical

attention. If vomiting occurs, keep head below hips to prevent aspiration of

vomitus.

INHALATION: Move victim to fresh air. Apply oxygen or artificial respiration if required.

Obtain medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOUR: Clear liquid; slight petroleum odour

SPECIFIC GRAVITY:

BOILING POINT (°C):

Not available

MELTING POINT (C):

Not available

SOLUBILITY IN WATER: Insoluble pH: Not applicable

PERCENT VOLATILE BY VOLUME: Not available EVAPORATION RATE: Not available

VAPOUR PRESSURE (mmHg): Negligible at ambient temperature and pressure.

VAPOUR DENSITY (air = 1): Not available BULK DENSITY: Not applicable

SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: $\geq 104^{\circ} \text{C (PMCC)}$ (based on components)

SPECIAL FIRE FIGHTING Self-contained breathing apparatus required for fire fighting PROCEDURES: Self-contained breathing apparatus required for fire fighting personnel. Remove containers from fire area, or cool with

water spray, if possible.

UNUSUAL FIRE AND EXPLOSION This product is combustible.

HAZARDS:

SECTION VII: REACTIVITY DATA

STABILITY: STABLE [XX] UNSTABLE []

INCOMPATIBILITY Avoid contact with strong oxidizers.

(CONDITIONS TO AVOID):

CONDITIONS OF REACTIVITY: Not available.

HAZARDOUS DECOMPOSITION May release oxides of carbon, methylacrylate

PRODUCTS: monomers, smoke and irritating vapours when heated to

decomposition.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR [XX] MAY OCCUR []

SECTION VIII: PREVENTATIVE MEASURES

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: Under normal conditions respiratory protection is not required. In

poorly ventilated areas or enclosed spaces use an approved respirator

with organic vapour cartridges or SCBA as required to prevent

exposure.

VENTILATION: Use local exhaust ventilation, process enclosure or other engineering

controls to maintain concentration of mists and vapours below TLV.

Ensure all equipment used is explosion proof.

PROTECTIVE GLOVES: Chemical resistant gloves recommended.

EYE PROTECTION: Wear non-vented chemical goggles during use.

OTHER PROTECTIVE EQUIPMENT Full body covering clothing recommended. Ensureeye wash station

and emergency shower are available.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Practice reasonable caution and personal cleanliness. Avoid skin and eye contact, ingestion and inhalation. Launder contaminated clothing before reuse. Keep away from oxidizers and ignition sources. Maintain temperature below flash point. Ground and bond containers before transferring.

STEPS TO BE TAKEN IN CASE THE MATERIAL IS SPILLED OR RELEASED

Use appropriate safety equipment and personnel protective equipment. Evacuate nonessential personnel. Eliminate ignition sources. Stop leak if possible to do so without risk. For large spills, dike to prevent spread. Collect spilled material by vacuum if possible. Soak up remainder and small spills with absorbent material. Collect contaminated material and absorbents in approved containers for disposal. Large pools may be covered with foam to prevent vapour evolution. Comply with federal, provincial and local requirements for spill notification.

WASTE DISPOSAL METHOD

Dispose of in accordance with federal, provincial and local regulations. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal.

SECTION IX: PREPARATION

THE INFORMATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE.

DATE ISSUED: November 20, 2014 BY: Product safety committee

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