



# MATERIAL SAFETY DATA SHEET

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## DRILLING DETERGENT

### SECTION I: IDENTIFICATION OF PRODUCT

**Product Name:** DRILLING DETERGENT  
**Chemical Family:** Anionic Surfactant blend  
**WHMIS Classification:** D2A  
**Workplace Hazard:** toxic effects

**Product Use:** Surfactant  
**TDG Classification:** Not regulated  
**Packaging Group:** Not applicable  
**PIN:** Not applicable

### SECTION II: HAZARDOUS INGREDIENTS

Ingredients	Percent	CAS Number	LD <sub>50</sub> (Rat/Oral)	LC <sub>50</sub> (Rat/Inhale)
Ethylene Glycol	15-40	107-21-1	4000 mg/kg	2725 mg/m <sup>3</sup> /4 hr

### SECTION III: TOXICOLOGICAL PROPERTIES

**Route of entry:**  Skin  Eye Contact  Inhalation  Ingestion

**Effects of acute exposure:**

- May cause mild irritation to the eyes and skin based on animal information. Ethylene glycol has been shown to cause renal toxicity from dermal adsorption when tested in laboratory animals.
- If ingested, it may cause nausea vomiting, diarrhea and possible liver and kidney damage. Animal toxicity values do not meet criteria, but ethylene glycol is more toxic to humans and there are numerous human case reports of toxicity and death published in the literature. Ingestion of ethylene glycol can cause CNS depression (inebriation, convulsions and coma), metabolic acidosis, pulmonary oedema, cardio/respiratory effects and death. Ingestion of ethylene glycol has also been shown to cause adverse blood effects in laboratory animals.
- May cause headache, nausea and possible dizziness. Inhalation of vapour and mist of ethylene glycol at elevated temperatures, or in enclosed spaces, causes irritation of the nose and throat.

**Effects of chronic exposure:** Chronic toxic effects

**Exposure limits:** ACGIH – TLV: Ethylene Glycol 100 mg/m<sup>3</sup>

**Irritancy of product:** Skin and eyes may cause irritation of upper respiratory tract.

**Sensitization to product:** No information available

**Carcinogenicity:** No information available

**Reproductive toxicity:** No information available

**Teratogenicity:** Ethylene glycol is tetratogenic and embryo toxic in animal studies

**Mutagenicity:** No information available

**Name of toxicological synergistic products:** No information available

*“dedicated to exceeding customer expectations”*



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## SECTION IV: FIRST AID MEASURES

**Skin contact:** Wash with soap and plenty of water for at least 5 minutes. Remove contaminated clothing and footwear. If irritation persists, or develops, obtain medical attention.

**Eye contact:** Flush with gently flowing warm water for 15 minutes, or until irritation ceases. When flushing is complete obtain medical attention.

**Inhalation:** Move to fresh air. Apply oxygen or artificial respiration if required. If breathing difficulties or distress continues, obtain medical attention.

**Ingestion:** Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. If conscious, rinse out mouth thoroughly with water. This product contains ethylene glycol, ingestion and lack of immediate medical attention may result in kidney and liver damage. Obtain medical attention or contact poison control centre immediately. Never give anything by mouth if victim is unconscious, rapidly losing consciousness or convulsing.

## SECTION V: PHYSICAL DATA

**Physical state:** Liquid

**Appearance and odour:** Medium blue colour, petroleum odour

**Odour threshold:** Not applicable

**Specific gravity:** 1.03

**Vapor pressure (mmHG):** Not determined

**Vapor density (Air=1):** Not determined

**Evaporation rate:** Not determined

**Boiling point (°C):** 105

**Freeze/Melting point (°C):** -15

**pH:** 7.0-8.0

**Solubility in Water:** Complete



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## SECTION VI: FIRE AND EXPLOSION DATA

**Conditions of flammability:** Although this product is not considered flammable, loss of water in a fire situation may render the material combustible.

**Means of extinguishing:** Use media suitable for surrounding material

**Flash point:** >100°C

**Upper flammable limit:** Not determined

**Lower flammable limit:** Not determined

**Auto-ignition temperature:** Not determined

**Hazardous combustion products:** Not applicable

**Explosion data-sensitivity to mechanical impact:** Not applicable

**Explosion data-sensitivity to static discharge:** Not applicable

## SECTION VII: REACTIVITY DATA

**Chemically unstable (conditions):** Stable

**Product incompatible with:** Strong oxidizing agents and caustic solutions.

**Conditions of reactivity:** Not available

**Hazardous decomposition products:** Oxides of carbon, nitrogen and sulphur on combustion



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## SECTION VIII: PREVENTATIVE MEASURES

**Personal protective equipment:** In the absence of adequate ventilation use approved respirators with organic vapour cartridges. Suggest rubber or viton protective gloves. Suggest chemical goggles and/or full-face shield be worn. Chemical resistant clothing as required preventing contact. Ensure eye wash station and emergency shower are available

**Specific engineering controls:** use local exhaust ventilation, process enclosure or other engineering controls to maintain level of airborne mists or vapours below TLV.

**Procedures for leak/spills:** Use appropriate safety equipment. Dike to prevent spread of spilled materials. Stop leak if possible to do so without risk. Small spills; soak up with absorbent materials. Large spills; collect uncontaminated material for repackaging, collect contaminated material in an approved container for disposal, treat remainder as a small spill. Collect absorbent material in approved container for disposal. Flush spill area thoroughly with water. Collect wash water in approved containers for disposal. Do not allow material to enter storm sewers or public waterways.

**Waste disposal:** Dispose 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. Empty containers that have not been rinsed and purged, contain residual hazardous material and must be disposed of, or recycled in accordance with local regulations.

**Handling procedures and equipment:** Avoid ingestion. Avoid breathing vapours and mists. Avoid direct or prolonged contact with skin and eyes. Thoroughly clean contaminated clothing and footwear before rewearing.

**Storage requirements:** Store in a cool, dry area away from ignition sources and incompatible materials.

**Special shipping information:** Not applicable

## SECTION IX: PREPARATION

**Date updated:** February 19, 2010

**Prepared by:** Product Safety Committee

All the recommendations and suggestions herein concerning this product are based upon tests and data believed to be reliable, however it is the user's responsibility to determine the safety, toxicity and sustainability for their own use of the product described herein. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Q'Max Solutions Inc. as to the effects of such use, the results to be obtained, or the safety and toxicity of the product nor does Q'Max Solutions Inc. assume any liability arising out of use by others. Nor is the information herein to be considered as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.