



MATERIAL SAFETY DATA SHEET

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1-613-996-6666 – CANUTEC – Transportation Emergency
1-888-243-9771 – ChExSS – Chemical Exposure

Q'MAX DRILL

SECTION I: IDENTIFICATION OF PRODUCT

Product Name: Q'MAX DRILL
Chemical Family: Amines
WHMIS Classification: D-2B
Workplace Hazard: Skin and eye irritant

Product Use: Shale inhibitor
TDG Classification: Not regulated
Packaging Group: Not applicable
PIN: Not applicable

SECTION II: HAZARDOUS INGREDIENTS

Ingredients	Percent Wt	CAS Number	LD ₅₀ (Rat/Oral)	LC ₅₀ (Rat/Inhalation)
Formic Acid	0.1-1	64-18-6	1100 mg/kg	2000ppm / 4hr

SECTION III: TOXICOLOGICAL PROPERTIES

Route of entry: Skin Eye Contact Inhalation Ingestion

Effects of acute exposure: Mists cause irritation of the nose and throat, with headache. High vapour concentrations may cause nausea, vomiting, headache, dizziness, and irregular eye movements. Liquid and mist may irritate the eyes, with excess blinking and tear production. May cause abdominal discomfort, nausea, vomiting, dizziness, drowsiness and central nervous system effects. Product is a skin irritant. Prolonged or repeated skin contact may result in irritation.

Effects of chronic exposure: May result in central nervous system damage, blindness, damage to pancreas, liver or kidneys. This product may aggravate existing respiratory, kidney, skin or eye disease.

Exposure limits:

- ACGIH (TLV-TWA): 5 ppm
- OSHA (PEL-TWA): 5 ppm

Irritancy of product: Irritant

Sensitization to product: Not determined

Carcinogenicity: None known

Reproductive toxicity: None known

Teratogenicity: None known

Mutagenicity: None known

Name of toxicological synergistic products: None known



SECTION IV: FIRST AID MEASURES

Skin contact: Remove any contaminated clothing and wash affected area with plenty of soap and water for 15 minutes. Wash contaminated clothing and decontaminate shoes prior to reuse. If irritation develops and persists seek medical attention.

Eye contact: Immediately flush eyes with lukewarm water for at least 15 minutes, holding eyelids apart to ensure rinsing of entire eye and lid. Seek immediate medical attention, preferably from an ophthalmologist.

Inhalation: Remove to fresh air. Administer artificial respiration or oxygen if indicated. If irritation persists, obtain medical attention. If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately. Obtain immediate medical attention.

Ingestion: Have victim drink 2 – 4 glasses of water. Never give anything by mouth to an unconscious or convulsing person. Induce vomiting if conscious. Obtain immediate medical attention.

SECTION V: PHYSICAL DATA

Physical state: Liquid

Appearance and odour: Clear, colourless, faint odour

Odour threshold: Not determined

Specific gravity: Not available

Vapor pressure (mmHG): Not available

Vapor density (Air=1): Not available

Evaporation rate: Not available

Boiling point (°C): Not available

Freeze/Melting point (°C): < -35

pH: 5-8

Co-efficient of water/oil distribution: Not determined



SECTION VI: FIRE AND EXPLOSION DATA

Conditions of flammability: Not considered a flammable product

Means of extinguishing: Water fog, "Alcohol" foam, carbon dioxide or dry chemical.

Flash point: >100°C (>212°F) Pensky-Martin CC

Upper flammable limit: Not Available

Lower flammable limit: Not Available

Auto-ignition temperature: Not Available

Hazardous combustion products: Carbon dioxide, Carbon monoxide smoke upon combustion.

Explosion data-sensitivity to mechanical impact: Not considered to be sensitive to mechanical impact.

Explosion data-sensitivity to static discharge: Not considered to be sensitive to static discharge.

SECTION VII: REACTIVITY DATA

Chemically unstable (conditions): Stable at normal temperatures and conditions of storage.

Product incompatible with: Strong oxidizing agent. May be corrosive to steel, brass, copper, aluminum and possibly other soft metals overtime.

Conditions of reactivity: Avoid excessive heat, sparks, open flame, other sources of ignition.

Hazardous decomposition products: Emission of Nitrogen Oxide. Carbon dioxide, Carbon monoxide smoke upon combustion.

SECTION VIII: PREVENTATIVE MEASURES

Personal protective equipment: If personnel exposure exceeds the exposure limits, select appropriate respiratory protective equipment in accordance with NIOSH/OSHA recommendations. Rubber or neoprene gloves. Chemical resistant coveralls where contact is likely. Long sleeves where only incidental contact is likely. Chemical splash goggles and/or face shield. Emergency eye wash fountains and safety showers are recommended to be proximal to work station. Remove contaminated clothing and launder before reuse.

Specific engineering controls: Mechanical ventilation is required for all indoor situations to control fugitive emissions. Electrical and mechanical equipment should be explosion-proof. Concentrations in air should be maintained below the recommended threshold limit value if unprotected personnel are involved. For entry into confined spaces (i.e. bulk storage tanks) a proper confined space entry procedure must be followed, including ventilation and testing of tank atmosphere. Local ventilation recommended where mechanical ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit. Make up air should always be supplied to balance air exhausted (either generally or locally).



Procedures for leak/spills: Eliminate all ignition sources. Isolate hazard area and restrict access. Try to work upwind of spill. Avoid direct contact with material. Wear NIOSH approved self-contained breathing apparatus (if applicable) and protective clothing. Handling equipment must be grounded. Prevent spill material from entering sewers, watercourses or low-lying areas. Stop leak only if safe to do so. Dike and contain land spills with inert material (earth, clay or sand); contain water spills by booming. Use water fog to knock down vapors, contain runoff. For large spills, remove by mechanical means and place in containers. Absorb residue or small spills with inert absorbent material and remove to non-leaking containers for disposal. Flush area with water to remove trace residue. DO NOT flush to sewers. Collect waste for proper disposal.

Waste disposal: Alcohol wastes are not suitable for underground injection. Waste management priorities (depending on volumes and concentration of waste) are 1. Recycle (reprocess) 2. Energy recovery (cement kilns, thermal power generation), 3. Incineration, 4. Disposal at a licensed waste disposal facility. Do not attempt to combust waste on-site; incinerate at a licensed waste disposal site with approval of environmental authority. Dispose of in accordance with municipal, state/provincial and federal regulations. These regulations may apply to empty containers, liner and rinsate.

Handling procedures and equipment: Maintain good personal hygiene. Wear appropriate personal protective equipment and avoid contact with skin, eyes or clothing. No smoking, eating or drinking allowed when using this product. Wash thoroughly after handling product. Avoid breathing vapors/dust and prolonged or repeated contact with skin or eyes. Use adequate ventilation. Locate safety shower and eyewash station in use area. Use explosion-proof equipment, intrinsically safe electrical systems, and non-sparking tools. Do not handle or store near an open flame, sources of heat, or sources of ignition. Material may accumulate static charges, which may cause a spark. Static charge build up could become an ignition source. Use proper grounding procedure. Empty containers may contain product residue. Follow labeled warnings even after container is emptied. Do not cut, drill, grind or weld on or near container. Air dry and then launder contaminated clothing prior to reuse. Store product-contaminated rags in container with tight-fitting lid.

Storage requirements: Store in a cool, well-ventilated area, away from incompatibles. Keep container tightly closed when not in use. Store in totally enclosed equipment, designed to avoid ignition and human contact. Store in an isolated fireproof building that is cool and well ventilated. Storage tanks should be above ground, over an area sealed on the bottom and diked to hold entire contents. Storage tank vents should have a flame arrestor.

Special shipping information: Not applicable

SECTION IX: PREPARATION

Date updated: September, 2007

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.