



Prairie Mud Service Ltd.

"Serving Western Canada with 24 Hour Drilling Mud Service"

MSDS (Material Safety Data Sheet)

Section I: IDENTIFICATION OF PRODUCT

Product Identifier **PRAIRIE DRILL ENZYME**

Supplier: **Prairie Mud Service**

738 - 6 Street
Estevan, SK S4A 1A4
(306) 634-3411
Fax (306) 634-6694

Chemical Family / Formula: Enzymes and acid blend

Product Use: Drilling mud additive

Section II: HAZARDOUS AND/OR INGREDIENT DISCLOSURE COMPONENTS

Name Percent (%) CAS# LD50 (oral rat) LD50 (dermal rabbit) LC50 (inhalation rat)

Citric Acid 30-60 77-92-9 3000 mg/kg Not determined Not determined

Amylase 1-5 9000-90-2 Not determined Not determined Not determined

Section III: HEALTH HAZARDS

Routes of Entry [XX] SKIN [XX] EYE CONTACT [XX] INHALATION [XX] INGESTION

Threshold Limit Value Not determined

Skin Contact May cause irritation.

Eye Contact May cause irritation.

Ingestion May cause gastrointestinal irritation and dental erosion.

Inhalation

Dust may irritate the nose and throat. Inhalation may cause irritation of the mucous membranes. Repeated inhalation of enzyme aerosols may cause respiratory tract sensitization in susceptible individuals. Symptoms include shortness of breath, skin rashes and irritation to eyes.

Carcinogenicity Not determined

Reproductive Toxicity Not determined

Teratogenicity Not determined

Mutagenicity Not determined

Developmental Toxicity Not determined

Section IV: FIRST AID MEASURES

Skin Contact Flush skin with plenty of water. Remove contaminated clothing and shoes.

Wash clothing before reuse.

Eye Contact Immediately flush with running water for 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eye and lids. Seek medical attention.

Ingestion Do not induce vomiting. If conscious, give lots of water. Do not give anything by mouth to an unconscious person. Seek medical attention.

Inhalation Remove to fresh air.

Section V: PHYSICAL DATA

Appearance White granular powder

Odour Odourless

Specific Gravity 1.54

Boiling Point (°C) Not applicable

Melting Point (°C) Not determined

Solubility in Water 162 g / 100 mL

Percent Volatile by Volume Not determined

Evaporation Rate Not determined

Vapour Pressure (mm Hg) Not determined

Protective Equipment Safety glasses and chemically resistant gloves recommended



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Vapour Density (Air = 1) Not determined
pH 2.6 @10%, 2.4 @ 20% (wt/v)

Section VI: FIRE AND EXPLOSION HAZARD DATA

Flash Point Not applicable

Flammable Limits Not applicable

Extinguishing Media Water, dry chemical, foam

Special Fire Fighting Procedures Self-contained respirators required for fire fighting personnel.

Unusual Fire and Explosion Hazards None known

Section VII: REACTIVITY DATA

Stability [XX] STABLE UNSTABLE

Incompatibility (Conditions to Avoid) Alkali metals, organic acids, oxides of sulphur and strong bases.

Conditions of Reactivity Not known

Hazardous Decomposition Products CO_x on combustion.

Hazardous Polymerization [XX] WILL NOT OCCUR MAY OCCUR

Section VIII: PREVENTIVE MEASURES

Respiratory Protection NIOSH approved dust mask if ventilation is inadequate.

Ventilation General mechanical

Protective Gloves Chemically resistant

Eye Protection Safety glasses with side shields

Other Protective Equipment (Specify) None known

Steps to be taken in case the Material is Spilled or Released

Wear protective equipment. For small spills, sweep up and dispose of in DOT approved waste containers. For large spills, shovel into DOT approved waste containers. Keep out of sewers, storm drains, surface waters and soil.

Handling and Storage

Store in a cool, dry, well-ventilated place away from incompatible materials. Keep bags or fibre drums dry at all times. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Do not cut, grind, weld, or drill on or near this container. Containers, even those that have been emptied, will retain product residue, always obey hazard warnings and handle empty containers as if they were full.

Disposal

Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures.

SECTION IX: PREPARATION

The above information is supplied as a customer service and is provided in good faith. Although it has been based on data drawn from sources deemed to be reliable, Prairie Mud Service cannot guarantee its accuracy and assumes no responsibility for conditions resulting from its use.

Date Prepared: November 27, 2009
Prepared By: Product Safety Committee
Phone: 306-634-3411



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