



MATERIAL SAFETY DATA SHEET

SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME: Chembreak ECA

PRODUCT USE: Drilling Mud Additive **CAS No.**

CHEMICAL FAMILY: Enzymes and Acid Blend

WORK PLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D2A, D2B

WORK PLACE HAZARD: Respiratory Tract Sensitizer, Skin and Eye Irritant

TRANSPORTATION OF DANGEROUS GOODS (TDG)

SHIPPING NAME: Not Regulated Under TDG

TDG CLASSIFICATION: N/A

UN NUMBER (PIN): N/A

PACKING GROUP: N/A

SECTION II: HAZARDOUS INGREDIENTS

<u>INGREDIENT</u>	<u>PERCENT</u>	<u>CAS NUMBER</u>	<u>LD₍₅₀₎ OralRat</u>	<u>LC₍₅₀₎ Inhal. Rat</u>
Citric Acid	30-60%	77-92-9	3000 mg/m ³	N/D
Amylase	1-5%	9000-90-2	N/D	N/D

SECTION III: TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: SKIN EYE CONTACT INHALATION INGESTION

THRESHOLD LIMIT VALUE: N/D

EYE CONTACT: May Cause Irritation.

SKIN CONTACT: May Cause Irritation.

INGESTION: May Cause Gastrointestinal Irritation and Dental Erosion.

INHALATION: Dust may irritate the nose and throat. Inhalation may cause irritation to 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.



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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 VOMITTING. 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 AND ODOUR:	White granular powder; no odour
SPECIFIC GRAVITY:	1.54 g/cc
BOILING POINT (°C):	N/A
MELTING POINT (°C):	N/D
SOLUBILITY IN WATER:	162g / 100 ml
pH:	2.6 @ 10%, 2.4 @ 20% (wt/v)
PERCENT VOLATILE BY VOLUME:	N/D
EVAPORATION RATE:	N/D
VAPOUR PRESSURE (mm Hg):	N/D

SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	N/A
FLAMMABLE LIMITS:	N/A
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:	Stable [XX]	Unstable []
INCOMPATIBILITY (CONDITIONS TO AVOID):	Alkali metals, organic acids, oxides of sulphur and strong	



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bases.

HAZARDOUS DECOMPOSITION PRODUCTS: CO_x, on combustion.

HAZARDOUS POLYMERIZATION: Will Not Occur [XX] May Occur []

SECTION VIII: PREVENTIVE MEASURES

SPECIAL PROTECTION INFORMATION

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.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

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.

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. Keep out of sewers, storm drains, surface waters and soil.

WASTE DISPOSAL METHOD

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

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