SECTION 1: IDENTIFICATION

Company Name: QUALICHEM, INC.

Address: P.O. BOX 926

SALEM, VA 24153

Phone No. (540) 375-6700

Fax No. (540) 375-3880

Emergency Phone No. | CHEM-TEL 800-255-3924

Date Prepared: 3/1/94
Date Revised: 2/23/10

SECTION 2: INGREDIENTS

 MATERIAL
 CAS NO.
 %

 MONOETHANOLAMINE
 141-43-5
 5-10

 SODIUM SILICATE
 1344-09-8
 5-10

 POTASSIUM HYDROXIDE
 1310-58-3
 1-5

 SODIUM HYDROXIDE
 1310-73-2
 1-5

SECTION 3: HEALTH HAZARDS

Ingestion: MAY BE TOXIC IN CONCENTRATED FORM. DO NOT TAKE INTERNALLY. DUE TO

ALKALINE NATURE, MAY CAUSE SEVERE IRRITATION, POSSIBLE CHEMICAL

BURNS.

Inhalation: NOT A LIKELY ROUTE OF EXPOSURE. UNLIKELY HIGH VAPOR OR MIST

CONCENTRATIONS MAY IRRITATE MUCOUS MEMBRANES.

Skin Contact: PROLONGED CONTACT MAY CAUSE IRRITATION.

Eye Contact: MAY CAUSE SEVERE IRRITATION, EYE DAMAGE, BLINDNESS.

Other Information: OTHER THAN ACUTE EFFECTS LISTED ABOVE, NO LONG TERM EFFECTS

KNOWN.

SECTION 4: FIRST AID

Ingestion: DRINK SEVERAL GLASSES OF WATER TO DILUTE. DO NOT INDUCE VOMITING

UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING

BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

Inhalation: REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF

SYMPTOMS PERSIST

Skin Contact: | WASH WITH PLAIN WATER OR SOAP AND WATER.

Eye Contact: | IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND

GET MEDICAL ATTENTION IF IRRITATION PERSISTS.

Notes to Physician: THIS PRODUCT IS MILDLY ALKALINE. TREAT SYMPTOMS WITH SUPPORTIVE

MEASURES.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method: NONE Lower Limit in Air: N.A. Upper Limit in Air: N.A.

Extinguishing Media: WATER OR ANY MEDIA SUITABLE FOR THE SURROUNDING FIRE.

Procedures: FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT.
SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED IN

CONFINED AREAS.

Unusual Hazards: NONE

Combustion Products: | IF WATER IS EVAPORATED, OXIDES OF CARBON AND NITROGEN MAY BE

PRODUCED.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: WEAR PERSONAL PROTECTIVE EQUIPMENT AS SPECIFIED IN SECTION 8.

Environmental Precautions: THIS PRODUCT HAS A VERY LOW HAZARD POTENTIAL IF RELEASED INTO THE

ENVIRONMENT ACCIDENTLY.

Procedures for Clean Up: SMALL SPILLS MAY BE FLUSHED WITH COPIOUS QUANTITIES OF WATER.

PREFERABLY TO A SANITARY SEWER. LARGER SPILLS MAY BE DIKED TO MINIMIZE RUN-OFF. LIQUID MAY BE ABSORBED IN SAWDUST OR ANY

AVAILABLE ABSORBANT AND SWEEPINGS DISPOSED OF IN A LANDFILL. OBEY

ALL FEDERAL, STATE OR LOCAL REGULATIONS.

Prohibited Materials: NONE

SECTION 7: HANDLING AND STORAGE

> Handling: THIS PRODUCT HAS A LOW HAZARD POTENTIAL BUT NORMAL INDUSTRIAL

HANDLING PRECAUTIONS SHOULD BE OBSERVED. AVOID BREATHING MISTS.

AVOID CONTACT WITH EYES.

Storage: KEEP OUT OF REACH OF CHILDREN. STORE IN A COOL, DRY PLACE. KEEP

CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Precautionary Measures: STANDARD INDUSTRIAL HANDLING PRECAUTIONS. WASH THOROUGHLY AFTER

HANDLING CHEMICALS.

Engineering Controls: USE WITH ADEQUATE VENTILATION TO KEEP EXPOSURES BELOW

OCCUPATIONAL EXPOSURE LIMITS.

MONOETHANOLAMINE: ACGIH - 3 ppm (TWA), 6 ppm (STEL); OSHA - 3 ppm Control Limits:

(TWA). POTASSIUM HYDROXIDE: OSHA PEL - 2 mg/m3 (Ceiling); ACGIH TLV - 2 mg/m3 (Ceiling). SODIUM HYDROXIDE: OSHA PEL - 2 mg/m3 (Ceiling); ACGIH TLV -

Equipment for Personal 2 ma/m3 (Ceilina).

SAFETY GLASSES WITH SIDE SHIELDS AND IMPERMEABLE GLOVES SHOULD BE Protection:

WORN WHEN HANDLING THE CONCENTRATED PRODUCT. EYEWASH STATION

IN AREA OF USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

> Appearance: **BROWN LIQUID**

> > Odor: MILD AMINE

pH (undiluted): 12.0-12.4 pH (3% in DI water):

11.1-11.7

Specific Gravity: 1.115-1.135

Density: 9.39 lbs./gal.

COMPLETE Solubility in Water:

>212⁰F Boiling Point:

Percent Volatile: >50

Vapor Pressure (mmHg): N.A.

Vapor Density:

N.A.

Evaporation Rate: (water=1): 1

SECTION 10: STABILITY AND REACTIVITY

STABLE Stability:

Conditions to Avoid: NONE

Hazardous Polymerization: **STABLE**

> Conditions to Avoid: NONE

Incompatibility:

MAY REACT WITH STRONG OXIDIZING AGENTS OR ACIDS.

Hazardous Decomposition

Products: IF WATER EVAPORATED, OXIDES OF CARBON & NITROGEN COULD BE

PRODUCED BY COMBUSTION.

SECTION 11: TOXICOLOGICAL INFORMATION

Materials and Tests:
Carcinogenicity:
NO TOXICITY STUDIES HAVE BEEN CONDUCTED ON THIS PRODUCT.
NO COMPONENT OF THIS PRODUCT IS LISTED AS A CARCINOGEN BY IARC,
NTP, OR ACGIH.
NOT A SENSITIZER.

Mutagenicity: NO COMPONENT OF THIS PRODUCT IS CLASSIFIED AS A MUTAGEN.
Teratogenicity: NO COMPONENT OF THIS PRODUCT IS CLASSIFIED AS A TERATOGEN.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: NO TOXICITY TESTING HAS BEEN PERFORMED ON THIS PRODUCT.

SECTION 13: DISPOSAL CONSIDERATIONS

General Considerations: THIS PRODUCT HAS A LOW HAZARD PROFILE AND WOULD NOT NORMALLY BE CONSIDERED A HAZARDOUS WASTE.

Procedures: DISPOSAL BY USE PREFERRED BUT IF THIS NOT POSSIBLE, DILUTE WITH COPIOUS QUANTITIES OF WATER AND FLUSH TO WASTE, PREFERABLY TO A

SANITARY SEWER. HOWEVER, OBEY ALL FEDERAL, STATE OR LOCAL

REGULATIONS.

SECTION 14: TRANSPORT INFORMATION

Shipping Name: NOT REGULATED.

SECTION 15: REGULATORY INFORMATION

Regulation Material RQ Max. %
CERCLA (40 CFR302.4): POTASSIUM HYDROXIDE 1000 lbs. 5

SODIUM HYDROXIDE 1000 lbs 5

 SARA 302 (Sect. 355,
 Material
 TPQ
 Max. %

Appendix A): NONE

SARA 311/312: <u>Categories</u> <u>Hazards</u>

IMMEDIATE HEALTH EYE IRRITANT

SARA 313 (40 CFR Material Max. %

372.45): NONE

CWA (40 CFR 401.15): NONE

RCRA (40 CFR 261): NONE

Notes: | THIS PRODUCT NOT A HAZARDOUS WASTE PER RCRA REGULATIONS.

OSHA (29 CFR 1910.1200): ALL COMPONENTS LISTED UNDER THIS STANDARD ARE SHOWN IN SECTION 2

OF THIS MSDS.

WHMIS (Canada): CLASS D-2B: MATERIAL CAUSING OTHER TOXIC EFFECTS (TOXIC).

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CONTROLLED PRODUCTS

REGULATIONS.

Inventories: | ALL INGREDIENTS IN THIS PRODUCT ARE LISTED IN TSCA AND DSL (CANADA)

INVENTORIES.

SPECIAL STATE REGULATIONS

STATE	INGREDIENT	REGULATORY DESIGNATION
CA, MN, NJ, PA, MA	MONOE THANOLAMINE	HAZARDOUS SUBSTANCE LIST

SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

NFPA*	HAZARD	HMIS*
2	HEALTH (Blue)	2
0	FIRE (Red)	0
0	REACTIVITY (Yellow)	0
	PERSONAL PROTECTION	В
	SPECIAL HAZARDS	

^{*}Notes: 0 = Insignificant; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme

The data contained in this Material Safety Data Sheet has been prepared based upon an evaluation of the ingredients in the product, their concentration in the product and potential interactions. The information is offered in good faith and is believed to be accurate. It is furnished to the customer who is urged to study it carefully to become aware of hazards, if any, in the storage, handling, use and disposal of the product; and to insure his employees are properly informed and advised of all safety precautions required. The information is furnished for compliance with the "Occupational Safety and Health Act" of 1970, the "Hazards Communication Act" of 1983 as well as various other Federal, State and Local regulations. Use or dissemination of all or part of this information for any other purpose is prohibited by law.

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