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: 8/22/13 Date Revised: 9/10/13

SECTION 2: INGREDIENTS

 MATERIAL
 CAS NO.
 %

 TRIETHANOLAMINE
 102-71-6
 5-10

 MONOISOPROPANOLAMINE
 78-96-6
 1-5

SECTION 3: HEALTH HAZARDS

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

ALKALINE NATURE, MAY IRRITATE INTERNAL TISSUES.

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

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

Upper/Lower Limit in Air: N.A./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.

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.

Control Limits: TRIETHANOLAMINE: 5 mg/m³ (ACGIH, TWA).

Equipment for Personal

Protection:

SAFETY GLASSES WITH SIDE SHIELDS AND IMPERMEABLE GLOVES SHOULD BE

WORN WHEN HANDLING THE CONCENTRATED PRODUCT. EYEWASH STATION

IN AREA OF USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: | BLUE LIQUID

Odor: CHARACTERISTIC

pH (5% in DI water)): 9.1-9.5 Specific Gravity: 1.024-1.044

Density: 8.63 lbs./gal.
Solubility in Water: COMPLETE
Boiling Point: >212°F

Percent Volatile: | >60% (PRIMARILY WATER AND AMINE)

Vapor Pressure (mmHg): N.A.
Vapor Density: N.A.
Evaporation Rate: (water=1): 1

SECTION 10: STABILITY AND REACTIVITY

Stability: STABLE Conditions to Avoid: NONE

Hazardous Polymerization: STABLE
Conditions to Avoid: NONE

Incompatibility:

Hazardous Decomposition

MAY REACT WITH STRONG OXIDIZING AGENTS OR ACIDS.

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

PRODUCED BY COMBUSTION.

SECTION 11: TOXICOLOGICAL INFORMATION

Materials and Tests: NO TOXICITY STUDIES HAVE BEEN CONDUCTED ON THIS PRODUCT.

Carcinogenicity: NO COMPONENT OF THIS PRODUCT IS LISTED AS A CARCINOGEN BY IARC,

NTP, OR ACGIH.

Sensitization: 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): NONE

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

Appendix A): NONE

SARA 311/312: Categories Hazards

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.

THE PROPERTY OF THE PROPERTY O

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

<u>STATE</u>	<u>INGREDIENT</u>	REGULATORY DESIGNATION
MN, MA, PA	TRIETHANOLAMINE	HAZARDOUS SUBSTANCE LIST
NJ, PA, MA	MONOISOPROPANOLAMINE	HAZARDOUS SUBSTANCE LIST

SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

NFPA*	HAZARD	HMIS*
1	HEALTH (Blue)	1
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 ensure 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.

Revision 1.2