

MATERIAL SAFETY DATA SHEET

Q-COOL 311

SECTION 1:
IDENTIFICATION

Company Name: Address: Phone No. Fax No. Emergency Phone No. Date Prepared: Date Revised:	QUALICHEM, INC. P.O. BOX 926 SALEM, VA 24153 (540) 375-6700 (540) 375-3880 CHEM-TEL 800-255-3924 2/23/06 9/07/07
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SECTION 2:
INGREDIENTS

Hazardous Ingredients <u>MATERIAL</u>	<u>CAS NO.</u>	<u>%</u>	<u>TLV</u>
TRIETHANOLAMINE	102-71-6	5-10	5 mg/m ³ TWA
MONOISOPROPANOLAMINE	78-96-6	1-5	NONE ESTAB.
Non-Hazardous Ingredients			
ORGANIC CORROSION INHIBITORS		>5	NONE ESTAB.
WATER		BAL.	NONE ESTAB.

SECTION 3:
HEALTH HAZARDS

Ingestion: Inhalation: Skin Contact: Eye Contact: Other Information:	MAY BE TOXIC IN CONCENTRATED FORM. DO NOT TAKE INTERNALLY. DUE TO ALKALINE NATURE, MAY IRRITATE INTERNAL TISSUES. NOT A LIKELY ROUTE OF EXPOSURE. UNLIKELY HIGH VAPOR OR MIST CONCENTRATIONS MAY IRRITATE MUCOUS MEMBRANES. PROLONGED CONTACT MAY CAUSE IRRITATION. MAY CAUSE SEVERE IRRITATION OTHER THAN ACUTE EFFECTS LISTED ABOVE, NO LONG TERM EFFECTS KNOWN.
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SECTION 4:
FIRST AID

Ingestion: Inhalation: Skin Contact: Eye Contact: Notes to Physician:	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. REMOVE VICTIM TO FRESH AIR. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST WASH WITH PLAIN WATER OR SOAP AND WATER. IMMEDIATELY FLUSH WITH CLEAR WATER FOR 15 MINUTES AND GET MEDICAL ATTENTION IF IRRITATION PERSISTS. THIS PRODUCT IS MILDLY ALKALINE. TREAT SYMPTOMS WITH SUPPORTIVE MEASURES.
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SECTION 5:
FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method: Lower Limit in Air: Upper Limit in Air: Extinguishing Media: Procedures: Unusual Hazards: Combustion Products:	NONE N.A. N.A. WATER OR ANY MEDIA SUITABLE FOR THE SURROUNDING FIRE. FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED IN CONFINED AREAS. NONE IF WATER IS EVAPORATED, OXIDES OF CARBON AND NITROGEN MAY BE PRODUCED.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	THE WEARING OF SAFETY GLASSES IS RECOMMENDED.
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.
Engineering Controls:	NONE
Control Limits:	NONE.
Equipment for Personal Protection:	EYEWASH STATION IN AREA OF USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	BLUE LIQUID
Odor:	MILD AMINE
pH (5% in DI water):	9.1-9.5
Specific Gravity:	1.019-1.039
Density:	8.57 lbs./gal.
Solubility in Water:	COMPLETE
Boiling Point:	>212°F
Percent Volatile:	>60
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:	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

Material & Tests:	TRIETHANOLAMINE: ORAL LD50 (RAT) 4920 ul/kg; ORAL LD50 MOUSE 5846 mg/kg; SKIN LD50 (RABBIT) >20 g/kg.
Symptoms:	NONE KNOWN
Effects:	NONE KNOWN

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SECTION 12: ECOLOGICAL INFORMATION

Possible Effects:	MINIMUM TOXICITY EXPECTED.
Biodegradability:	ALL ORGANIC COMPONENTS ARE BIODEGRADABLE.
Persistence:	NOT PERSISTENT.
Aquatic Toxicity:	ESTIMATED >1000 ppm.

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:	COMPOUNDS CLEANING, LIQUID. N.O.S.
Primary Hazard Class:	NONE
Secondary Hazard Class:	NONE
Identification No.	N.A.
Packing Group:	N.A.
2004 NAERG No.	N.A.

SECTION 15: REGULATORY INFORMATION

<u>Regulation</u>	<u>Material</u>	<u>RQ</u>	<u>Max. %</u>
CERCLA (40 CFR302.4):	NONE		
SARA 302 (Sect. 355, Appendix A):	<u>Material</u>	<u>TPQ</u>	<u>Max. %</u>
SARA 311/312 :	<u>Categories</u>		<u>Hazards</u>
	IMMEDIATE HEALTH		EYE IRRITANT
SARA 313 (40 CFR 372.45):	<u>Material</u>		<u>Max. %</u>
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.		
TSCA	ALL INGREDIENTS IN THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY.		

SPECIAL STATE REGULATIONS

<u>STATE</u>	<u>INGREDIENT</u>	<u>%</u>	<u>REGULATORY DESIGNATION</u>
NONE			

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SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

<u>NFPA*</u>	<u>HAZARD</u>	<u>HMIS*</u>
1	HEALTH (Blue)	1
0	FIRE (Red)	0
0	REACTIVITY (Yellow)	0
	PERSONAL PROTECTION	B
	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.