

MATERIAL SAFETY DATA SHEET

Q-COOL 355D

SECTION 1:
IDENTIFICATION

Company Name:	QUALICHEM, INC.
Address:	P.O. BOX 926 SALEM, VA 24153
Phone No.	(540) 375-6700
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Date Prepared:	3/17/09
Date Revised:	9/23/10

SECTION 2:
INGREDIENTS

<u>MATERIAL</u>	<u>CAS NO.</u>	<u>%</u>
TRIETHANOLAMINE	102-71-6	10-30

SECTION 3:
HEALTH HAZARDS

Emergency Overview:	CONCENTRATE WILL CAUSE EYE IRRITATION BUT RECOMMENDED USE DILUTIONS ARE NOT EXPECTED TO CAUSE IRRITATION. MISTS OF THE CONCENTRATE AND DILUTION MAY CAUSE RESPIRATORY IRRITATION. WASH THOROUGHLY AFTER HANDLING. AVOID BREATHING MISTS.
Ingestion:	MAY BE TOXIC IN CONCENTRATED FORM. DO NOT TAKE INTERNALLY.
Inhalation:	NOT A LIKELY ROUTE OF EXPOSURE. 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:	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.
Procedures for Clean Up:	SMALL SPILLS MAY BE FLUSHED WITH COPIOUS QUANTITIES OF WATER 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

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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: Engineering Controls:	STANDARD INDUSTRIAL HANDLING PRECAUTIONS. LOCAL OR GENERAL VENTILATION TO MAINTAIN VAPOR CONCENTRATIONS BELOW THRESHOLD LIMIT VALUES.
Control Limits: Equipment for Personal Protection:	TRIETHANOLAMINE: 5 mg/m ³ (ACGIH, TWA). SAFETY GLASSES AND IMPERVIOUS GLOVES. EYEWASH STATION IN AREA OF USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	CLEAR STRAW-COLORED LIQUID
Odor:	MILD AMINE
pH (5% in DI water):	7.4-7.8
Specific Gravity:	1.05-1.07
Density:	8.81 lbs./gal.
Solubility in Water:	COMPLETE
Boiling Point:	>212°F
Percent Volatile:	>30 (WATER)
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

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.
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.
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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.
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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> NONE	<u>TPQ</u>	<u>Max. %</u>
SARA 311/312:	<u>Categories</u> IMMEDIATE HEALTH		<u>Hazards</u> EYE IRRITANT
SARA 313 (40 CFR 372.45):	<u>Material</u> NONE		<u>Max. %</u>
CWA (40 CFR 401.15):	NONE		
RCRA (40 CFR 261): Notes:	NONE 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

<u>STATE</u> MN, MA, PA	<u>INGREDIENT</u> TRIETHANOLAMINE	<u>REGULATORY DESIGNATION</u> HAZARDOUS SUBSTANCE LIST
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SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

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

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

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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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