

MATERIAL SAFETY DATA SHEET

CARBAMATE

SECTION 1:
IDENTIFICATION

Company Name:	Chemworld
Address:	885 Woodstock Road Ste 430-111 Roswell, GA 30075
Phone No.	800.658.7716
Fax No.	877.209.1556
Emergency Phone No.	CHEM-TEL 800-255-3924
Date Prepared:	12/17/04
Date Revised:	5/21/09

SECTION 2:
INGREDIENTS

<u>MATERIAL</u>	<u>CAS NO.</u>	<u>%</u>
DISODIUM ETHYLENE BISDITHIOCARBAMATE	142-59-6	15
SODIUM DIMETHYLDITHIOCARBAMATE	128-04-1	15
ETHYLENE THIOUREA	96-45-7	0.3

SECTION 3:
HEALTH HAZARDS

Emergency Overview:	WILL CAUSE MODERATE SKIN IRRITATION. WILL CAUSE MODERATE EYE, NOSE, THROAT, AND LUNG IRRITATION.
Ingestion:	SLIGHTLY TOXIC. HARMFUL IF SWALLOWED.
Inhalation:	AVOID BREATHING VAPORS OR MISTS. PROLONGED OR EXCESSIVE INHALATION MAY CAUSE RESPIRATORY TRACT IRRITATION OR BURNS OF THE MUCOUS MEMBRANES.
Skin Contact:	A SINGLE, PROLONGED EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN ARMFUL AMOUNTS. CAUSES
Eye Contact:	CAN CAUSE MODERATE EYE IRRITATION. DISCOMFORT AND BLURRING OF VISION MAY OCCUR.
Other Information:	PRODUCT CONTAINS <1% ETHYLENE THIOUREA (96-45-7), WHICH IS LISTED AS AN ANTICIPATED HUMAN CARCINOGEN (NTP) AND AS A POSSIBLE HUMAN CARCINOGEN (GROUP 2B – IARC).

SECTION 4:
FIRST AID

Ingestion:	DRINK TWO GLASSES OF WATER. INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.
Inhalation:	IF BREATHING IS DIFFICULT, REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. GET MEDICAL ATTENTION IF COUGH OR OTHER SYMPTOMS DEVELOP.
Skin Contact:	WASH AFFECTED AREA IMMEDIATELY WITH LARGE AMOUNTS OF SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.
Eye Contact:	IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS.
Notes to Physician:	ALL TREATMENTS SHOULD BE BASED ON OBSERVED SIGNS AND SYMPTOMS OF DISTRESS IN THE PATIENT. TREAT SYPTOMATICALLY.

SECTION 5:
FIRE AND EXPLOSION HAZARD DATA

Flash Point/Method:	> 201° F (>93.9° C)/PMCC
Lower Limit in Air:	N.A.
Upper Limit in Air:	N.A.
Extinguishing Media:	WATER, CARBON DIOXIDE, FOAM, OR DRY POWDER.
Procedures:	FIREFIGHTERS SHOULD WEAR NORMAL PROTECTIVE EQUIPMENT. SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED IN CONFINED AREAS.
Unusual Hazards:	WHEN WATER HAS EVAPORATED, THE RESIDUE WILL BURN.
Combustion Products:	IF WATER IS EVAPORATED, OXIDES OF CARBON, PHOSPHORUS, SULFUR, AND NITROGEN AND HYDROCARBONS, FUMES, AND SMOKE MAY BE PRODUCED.

MATERIAL SAFETY DATA SHEET

CARBAMATE

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	WEAR PERSONAL PROTECTIVE EQUIPMENT AS RECOMMENDED IN SECTION 8. ELIMINATE ALL SOURCES OF IGNITION.
Initial Containment:	CONTAIN SPILLED MATERIAL. ABSORB SPILLS WITH INERT MATERIAL.
Large Spills Procedures:	WARNING. AVOID RUNOFF INTO STORM SEWERS AND DITCHES WHICH LEAD TO WATERWAYS. THIS PRODUCT IS TOXIC TO FISH. CONTAIN SPILLED LIQUID WITH SAND OR EARTH.
Small Spills Procedures:	CLEAN UP AREA BY ABSORBENT MATERIAL. OBEY ALL FEDERAL, STATE OR LOCAL REGULATIONS.

SECTION 7: HANDLING AND STORAGE

Handling:	FOLLOW ALL MSDS/LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED BECAUSE THEY MAY RETAIN PRODUCT RESIDUES. AVOID PROLONGED CONTACT WITH SKIN OR EYES. AVOID BREATHING MISTS. WASH HANDS THOROUGHLY AFTER HANDLING. STORE IN A SECURE AREA. PROVIDE APPROPRIATE VENTILATION.
Storage:	RECOMMENDED STORAGE TEMPERATURE: 35° F - 140° F. KEEP CONTAINER TIGHTLY CLOSED. DO NOT STORE NEAR COMBUSTIBLE MATERIALS. AVOID EXTREME TEMPERATURES. KEEP FROM FREEZING.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:	GOOD GENERAL VENTILATION SHOULD BE USED TO CONTROL AIRBORNE LEVELS. FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD BE EQUIPPED WITH AN EYEWASH FACILITY AND A SAFETY SHOWER.
Control Limits:	NONE
Equipment for Personal Protection:	CHEMICAL GOGGLES, PROTECTIVE GLOVES AND CLOTHING SHOULD BE WORN WHEN HANDLING THE CONCENTRATED PRODUCT. EYEWASH STATION AND SAFETY SHOWER IN AREA OF USE.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	AMBER LIQUID
Odor:	SLIGHT AMMONICAL
pH (undiluted):	11.5 – 12.4
Specific Gravity:	1.15 @77° F
Density:	9.6 lbs./gal.
Solubility in Water:	COMPLETE
Boiling Point:	>220°F
Percent Volatile:	>60
Vapor Pressure (mmHg):	< 17.5 @68° F
Evaporation Rate:	< 1 (butyl acetate =1)

SECTION 10: STABILITY AND REACTIVITY

Stability:	STABLE
Conditions to Avoid:	ACIDIFICATION RELEASES FLAMMABLE GASSES.
Hazardous Polymerization:	STABLE
Conditions to Avoid:	NONE
Incompatibility:	MAY REACT WITH STRONG OXIDIZING AGENTS AND MINERAL ACIDS (MAY RELEASE GASES SUCH AS AMINES, HYDROGEN SULFIDE AND CARBON DISULFIDE).
Hazardous Decomposition Products:	THERMAL DECOMPOSITION MAY RELEASE GASES SUCH AS AMINES, HYDROGEN SULFIDE AND CARBON DISULFIDE.

MATERIAL SAFETY DATA SHEET

CARBAMATE

SECTION 11: TOXICOLOGICAL INFORMATION

Material & Tests:	ORAL LD ₅₀ (RAT) = 1.4 g/kg. EYE IRRITATION (RABBIT) = NON-IRRITATING. SKIN IRRITATION (RABBIT) = NON-IRRITATING.
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SECTION 12: ECOLOGICAL INFORMATION

Aquatic Toxicity:	NO INFORMATION AVAILABLE
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SECTION 13: DISPOSAL CONSIDERATIONS

General Considerations:	THIS PRODUCT IS NOT A HAZARDOUS WASTE.. AVOID DISPOSAL INTO WASTE WATER TREATMENT FACILITIES. TREAT OR DISPOSE OF WASTE MATERIAL IN ACCORDANCE WITH ALL LOCAL, STATE/PROVINCIAL, AND NATIONAL REQUIREMENTS. UNCLEANED EMPTY CONTAINERS SHOULD BE DISPOSED OF IN THE SAME MANNER AS THE CONTENTS.
Waste Disposal:	
Procedures:	
Container Disposal:	

SECTION 14: TRANSPORT INFORMATION

Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DISODIUM METHYLENE BISDITHIOCARBAMATE)
Primary Hazard Class:	9
Identification No.:	UN3082
Packing Group:	PG III
2004 NAERG No.:	154

SECTION 15: REGULATORY INFORMATION

<u>Regulation</u>	<u>Material</u>	<u>RQ</u>	<u>Max. %</u>
CERCLA (40 CFR302.4):	ETHYLENE THIOUREA	10	0.3
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, DELAYED HEALTH		EYE, SKIN CORROSIVE
SARA 313 (40 CFR 372.45):	<u>Material</u> DISODIUM ETHYLENE BISDITHIOCARBAMATE, SODIUM DIMETHYLDITHIOCARBAMATE, ETHYLENE THIOUREA		
CWA (40 CFR 401.15):	NONE		
RCRA (40 CFR 261):	NONE		
OSHA (29 CFR 1910.1200):	ALL COMPONENTS LISTED UNDER THIS STANDARD ARE SHOWN IN SECTION 2 OF THIS MSDS.		
TSCA:	THIS PRODUCT IS SUBJECT OT REGULATION UNER THE US FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT (FIFRA) AND IS THEREFORE EXEMPT FROM US TOXIC SUBSTANCE CONTROL ACT (TSCA) INVENTORY LISTING REQUIREMENTS.		

SPECIAL STATE REGULATIONS

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

MATERIAL SAFETY DATA SHEET

CARBAMATE

SECTION 16 OTHER INFORMATION

SUGGESTED HAZARD RATINGS

<u>NFPA*</u>	<u>HAZARD</u>	<u>HMIS*</u>
2	HEALTH (Blue)	2
1	FIRE (Red)	1
0	REACTIVITY (Yellow)	0
	PERSONAL PROTECTION	D
	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.