ZEE COMPANY INC®
SOLUTIONS FOR EXCELLENCE
A Member of The Vincit Group

MATERIAL SAFETY DATA SHEET

I. GENERAL INFORMATION

PRODUCT NAME: BIOCIDE 4

DISTRIBUTOR'S ADDRESS: ZEE Company, Inc.
4146 South Creek Road
Chattanooga, TN 37406

24 HOUR EMERGENCY PHONE: 1-800-424-9300

TRADE NAME: COOLING WATER MICROBIOCIDE

CHEMICAL FORMULA: PROPRIETARY
CHEMICAL FAMILY: MICROBIOCIDE

HEALTH	3
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	D

II. HAZARDOUS INGREDIENTS

PRINCIPAL HAZARDOUS INGREDIENT(S):	% OF PRODUCT	PEL / TLV	CAS NO.
UNREACTED SODIUM HYDROXIDE	<10	2 MG/M3 CEILING (OSHA/ACGIH)	1310-73-2
OTHER COMPONENTS OF BIOCIDE 4 ARE CONSIDERED A TRADE SECRET		NOT ESTABLISHED	PROPRIETARY

THIS PRODUCT IS REGULATED UNDER FIFIRA BY THE U.S. EPA AND ITS COMPONENTS ARE NOT REQURIED TO BE LISTED ON THE U.S. TSCA INVENTORY.

III. PHYSICAL DATA

BOILING POINT (F):	214-216	SPECIFIC GRAVITY (H20=1):	APPROXIMATELY 1.35
VAPOR PRESSURE:	19 MM HG	PERCENT VOLATILE BY WEIGHT (%)	NA
VAPOR DENSITY:	NE	MELTING / FREEZING POINT (F):	NA
SOLUBILITY IN WATER:	MISCIBLE	PH:	APPROX. 12.5-13.0
APPEARANCE AND ODOR:	YELLOW LIQUID, MILD ODOR		

IV. FIRE AND EXPLOSION DATA

FLASH POINT: N/A
AUTO IGNITION TEMPERATURE: NE
FLAMMABLE LIMITS IN AIR, VOLUME PERCENTAGE (%): UPPER: N/A LOWER: N/A
EXTINGUISHER MEDIA: AS USED ON SURROUNDING FIRE
SPECIAL FIRE FIGHTING PROCEDURES: AVOID BREATHING FUMES.

UNUSUAL FIRE/EXPLOSION HAZARDS: NONE KNOWN.

V. PHYSICAL HAZARDS

STABILITY: STABLE CONDITIONS TO AVOID: EXTREME HEAT
MATERIALS TO AVOID: STRONG REDUCING AGENTS,STEEL,ALUMINMUM,ALCOHOLS,ALDEHYDES,ACIDS
HAZ. POLYMERIZATION: WILL NOT OCCUR CONDITIONS TO AVOID: NONE
HAZARDOUS DECOMPOSITION PRODUCTS: INCLUDE BROMINE AND CHLORINE

VI. HEALTH HAZARDS

ACUTE: SKIN & EYE IRRITANT CHRONIC: NONE

SIGNS AND SYMPTOMS OF EXPOSURE: CONTACT WITH BIOCIDE 4 WILL PRODUCE SEVERE EYE AND SKIN IRRITATION AND POSSIBLE BURNS.

MEDICAL CONDITIONS GENERALLY AGGREVATED BY EXPOSURE: EXCESSIVE INHALATION OF BIOCIDE 4 MISTS MAY IRRITATE RESPIRATORY PASSAGES.

LISTED AS POTENTIAL CARCINOGEN/POTENTIAL CARCINOGEN: IARC: NO NATIONAL TOXICOLOGY PROGRAM: NO

VII. EMERGENCY AND FIRST AID PROCEDURES

TREAT SYSTEMATICALLY AS OUTLINED BELOW:

INHALATION: IF AFFECTED, REMOVE PERSON TO FRESH AIR. IF BREATHING IS DIFFICULT, GIVE OXYGEN. GET MEDICAL ATTENTION.

SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. CONSULT A PHYSICIAN IF IRRITATION OCCURS.

EYES: FLUSH WITH CLEAN WATER FOR AT LEAST 15 MINUTES, LIFTING UPPER AND LOWER EYE LIDS OCCASIONALLY. GET MEDICAL ATTENTION.

INGESTION: IF PERSON IS CONSCIOUS, GIVE WATER TO DILUTE. DO NOT INDUCE VOMITING. SEEK MEDICAL ATTENTION IMMEDIATELY.

VIII. ENVIRONMENTAL DATA: SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

LARGE AND SMALL SPILL: LARGE AND SMALL SPILL: COMPLETELY CONTAIN ALL SPILLED MATERIAL. ABSORB ONTO INERT COMPOUND AND RECLAIM TO A CLOSED DOT APPROVED CONTAINER. RESIDUE MAY BE FLUSHED TO WASTE WITH LARGE QUANTITIES OF WATER. SEE SECTION X FOR MORE REGULATORY INFORMATION.

SEE SECTION X FOR MORE REGULATORY INFORMATION.

WASTE DISPOSAL METHODS: WASTE DISPOSAL METHODS: DISPOSE OF CONTAMINATED PRODUCT VIA AN APPROVED CHEMICAL WASTE DISPOSAL FIRM AND IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

IX. CONTROL MEASURES

RESPIRATORY PROTECTION: NONE REQUIRED UNDER NORMAL CONDITIONS.

VENTILATION: NOT REQUIRED

PROTECTIVE GLOVES: RUBBER OR PLASTIC

EYE PROTECTION: CHEMICAL SPLASH GOGGLES AND FACE SHIELD

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: IMPERVIOUS CLOTHING: IE. APRONS AND BOOTS TO MINIMIZE POTENTIAL CONTACT.

WORK/HYGENIC PRACTICES: CONTAMINATED CLOTHING SHOULD BE LAUNDERED BEFORE REUSE.

OTHER: SAFETY SHOWER AND EYE WASH FOUNTAIN. STORE BELOW 104F.

X. REGULATORY INFORMATION

DOT SHIPPING NAME: CORROSIVE LIQUIDS,BASIC,INORGANIC,N.O.S.(HALOGENATED COMPLEX,SODIUM HYDROXIDE),8,UN 3266,III

HAZARD CLASSIFICATION: CORROSIVE UN / NA NUMBER: UN 3266

DOT LABEL REQUIRED: CORROSIVE

SARA TITLE III REPORTING: SECTION 311: X SECTION 312: X SECTION 313: NA

SARA 313 REPORTABLE PRODUCT: NA

SARA TPQ: NA

CERCLA REPORTABLE QUANTITY OF PRODUCT: >10000 POUNDS DUE TO SODIUM HYDROXIDE CONTENT.

HMIS RATING: HEALTH 3 FLAMMABILITY 0 REACTIVITY 0

DATE PREPARED: JUNE 2002

PREPARED BY: CHRIS BUNCH

NE = Not Established N/A = Not Applicable NR = Not Required < = Less Than > = Greater Than

THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM SOURCES BELIEVED TO BE RELIABLE AND IS OFFERED IN GOOD FAITH AS ACCURATE, BUT WITHOUT GUARANTEE. CONDITIONS OF USE AND SUITABILITY OF THE PRODUCT FOR PARTICULAR USES ARE BEYOND OUR CONTROL. ALL RISKS OF USE OF THE PRODUCT ARE THEREFORE ASSUMED BY THE USER AND WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT.