Chem-Impex International Inc.

Tel: (630) 766-2112 E-mail: <u>sales@chemimpex.com</u> Shipping and Correspondence: 935 Dillon Drive Wood Dale, IL 60191 USA Fax: (630) 766-2218 Web site: <u>www.chemimpex.com</u> Manufacturing site: 825 Dillon Drive Wood Dale, IL 60191 USA

SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	44140
NAME:	Benzothiazole
SYNONYMS:	
24 HOUR EMERGENCY TELEPHONE:	(800) 535-5053(USA) 352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER SERVICE:	(630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS) ACUTE TOXICITY, ORAL (CATEGORY 3), H301 ACUTE TOXICITY, INHALATION (CATEGORY 4), H332 ACUTE TOXICITY, DERMAL (CATEGORY 3), H311 EYE IRRITATION (CATEGORY 2A), H319 SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 3), H402 FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

PICTOGRAM

SIGNAL WORD



HAZARD STATEMENT(S)

H301 + H311	TOXIC IF SWALLOWED OR IN CONTACT WITH SKIN.
H319	CAUSES SERIOUS EYE IRRITATION.
H332	HARMFUL IF INHALED.
H402	HARMFUL TO AQUATIC LIFE.

PRECAUTIONARY STATEMENT(S)

P261	AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPORS/
1 201	SPRAY
P264	WASH SKIN THOROUGHLY AFTER HANDLING.
P270	DO NOT EAT, DRINK OR SMOKE WHEN USING THIS
1270	PRODUCT.
P271	USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
P273	AVOID RELEASE TO THE ENVIRONMENT.
P280	WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.
$P_{201} + P_{210} + P_{220}$	
P301 + P310 + P330	IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/ PHYSICIAN, RINSE MOUTH.
D202 + D252 + D212	
P302 + P352 + P312	IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.
	CALL A POISON CENTER OR DOCTOR/ PHYSICIAN IF YOU
	FEEL UNWELL.
P304 + P340 + P311	IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP
	COMFORTABLE FOR BREATHING. CALL A POISON CENTER/
	DOCTOR.
P305 + P351 + P338	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL
	MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND
	EASY TO DO. CONTINUE RINSING.
P337 + P313	IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/
	ATTENTION
P362	TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE
	REUSE.
P405	STORE LOCKED UP.
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED
	WASTE DISPOSAL PLANT.
HARADDO NOT	NONE
HAZARDS NOT	NONE
OTHERWISE	
CLASSIFIED (HNOC)	

OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:	C ₇ H ₅ NS
MW:	135.18
CAS-NO.	95-16-9
PURITY:	\geq 96% (GC)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
Benzothiazole		
	ACUTE TOX. 3; ACUTE TO	X. 4; <= 100%
	ACUTE TOX. 3; EYE IRRIT	. 2A;
	AQUATIC ACUTE 3; H301,	
	H332, H311, H319, H402	

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE	CONSULT A PHYSICIAN. SHOW THIS MATERIAL SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.
IF INHALED	IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.
IN CASE OF SKIN CONTACT	WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT	RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.
IF SWALLOWED	NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.
MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE	USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY
EXTINGUISHING MEDIA	CHEMICAL OR CARBON DIOXIDE
SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	CARBON OXIDES, NITROGEN OXIDES (NOX), SULPHUR OXIDES
ADVICE FOR	WEAR SELF-CONTAINED BREATHING APPARATUS FOR
FIREFIGHTERS	FIREFIGHTING IF NECESSARY.
FURTHER INFORMATION	NO DATA AVAILABLE

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES	WEAR RESPIRATORY PROTECTION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. FOR PERSONAL PROTECTION SEE SECTION 8.
ENVIRONMENTAL PRECAUTIONS	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.
METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP	SOAK UP WITH INERT ABSORBENT MATERIAL AND DISPOSE OF AS HAZARDOUS WASTE. KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING	AVOID CONTACT WITH SKIN AND EYES. AVOID INHALATION OF VAPOUR OR MIST. FOR PRECAUTIONS SEE SECTION 2.2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. CONTAINERS WHICH ARE OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE. Store at 2 - 8 °C
SPECIFIC END USE(S)	APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES. HAZARDOUS COMPONENTS WITHOUT WORKPLACE CONTROL PARAMETERS

EXPOSURE CONTROLS

APPROPRIATE	AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH
ENGINEERING	HANDS BEFORE BREAKS AND IMMEDIATELY AFTER
CONTROLS	HANDLING THE PRODUCT.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACEFACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FORPROTECTIONEYE PROTECTION TESTED AND APPROVED UNDER
APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH
(US) OR EN 166(EU).

SKIN PROTECTION	HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE"S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.
	FULL CONTACT MATERIAL: BUTYL-RUBBER MINIMUM LAYER THICKNESS: 0.3 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED:BUTOJECT (KCL 897, SIZE M)
	SPLASH CONTACT MATERIAL: BUTYL-RUBBER MINIMUM LAYER THICKNESS: 0.3 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED:BUTOJECT (KCL 897, SIZE M)
	IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.
BODY PROTECTION	COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.
RESPIRATORY PROTECTION	WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULLFACE PARTICLE RESPIRATOR TYPE N99 (US) OR TYPE P2 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).
CONTROL OF ENVIRONMENTAL EXPOSURE	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

·

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON DASIC	I II I SICAL AND CHEMICAL I KOI EKTIES
APPEARANCE	Colorless to slightly yellow clear liquid
ODOUR	CHARACTERISTIC
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	2 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT	231 °C
AND BOILING RANGE	
FLASH POINT	107 °C
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID,	NO DATA AVAILABLE
GAS)	
UPPER/LOWER	UPPER EXPLOSION LIMIT: 8.2 %(V)
FLAMMABILITY OR	LOWER EXPLOSION LIMIT: 0.9 %(V)
EXPLOSIVE LIMITS	
VAPOUR PRESSURE	CA.0.13 HPA AT 20 C - OECD TEST GUIDELINE 104
	CA.0.95 HPA AT 50 C - OECD TEST GUIDELINE 104
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	1.25
WATER SOLUBILITY	4.3 G/L AT 25 C
PARTITION COEFFICIENT:	LOG POW: 2.01 - (CALCULATED) - BIOACCUMULATION IS
N- OCTANOL/WATER	NOT EXPECTED., (LIT.)
AUTO-IGNITION	565 C
TEMPERATURE	
DECOMPOSITION	NO DATA AVAILABLE
TEMPERATURE	
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	NO DATA AVAILABLE

OTHER SAFETY INFORMATION

NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	NO DATA AVAILABLE
CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS	NO DATA AVAILABLE
CONDITIONS TO AVOID	NO DATA AVAILABLE
INCOMPATIBLE MATERIALS	NO DATA AVAILABLE

HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - CARBON OXIDES, NITROGEN OXIDES (NOX), SULPHUR OXIDES OTHER DECOMPOSITION PRODUCTS - NO DATA **AVAILABLE** IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. **TOXICOLOGICAL INFORMATION**

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	LD50 ORAL - RAT - FEMALE - 178 MG/KG
	(OECD TEST GUIDELINE 401)

LC50 INHALATION - RAT - MALE AND FEMALE - 4 H - 5 MG/L (OECD TEST GUIDELINE 403)

LD50 DERMAL - RAT - FEMALE - 933 MG/KG (OECD TEST GUIDELINE 402)

NO DATA AVAILABLE

SKIN	SKIN RABBIT
CORROSION/IRRITATION	RESULT: NO SKIN IRRITATION - 4 H
	(OECD TEST GUIDELINE 404)

SERIOUS EYE	EYES RABBIT
DAMAGE/EYE IRRITATION	RESULT: EYE IRRITATION
	(OECD TEST GUIDELINE 405)

RESPIRATORY OR SKIN LOCAL LYMPH NODE ASSAY (LLNA) MOUSE SENSITISATION **RESULT: NEGATIVE** (OECD TEST GUIDELINE 429)

GERM CELL	AMES TEST
MUTAGENICITY	SALMONELLA TYPHIMURIUM
	RESULT: NEGATIVE

CARCINOGENICITY	
IARC:	NO INGREDIENT OF THIS PRODUCT PRESENT AT
	LEVELS GREATER THAN OR EQUAL TO 0.1% IS
	IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED
	HUMAN CARCINOGEN BY IARC.

NTP:

OSHA:

CARCINOGEN BY NTP.
NO COMPONENT OF THIS PRODUCT PRESENT AT
LEVELS GREATER THAN OR EQUAL TO 0.1% IS ON
OSHA S LIST OF REGULATED CARCINOGENS.

NO INGREDIENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED

REPRODUCTIVE TOXICITY	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	ACUTE INHALATION TOXICITY - POSSIBLE DAMAGES:, MUCOSAL IRRITATIONS
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE
ADDITIONAL INFORMATION	RTECS: DL0875000
	TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
	AFTER ABSORPTION: WE HAVE NO DESCRIPTION OF ANY TOXIC
	SYMPTOMS. OTHER DANGEROUS PROPERTIES CAN NOT BE EXCLUDED.
	HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL

HYGIENE AND SAFETY PRACTICE.

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY TOXICITY TO FISH	LC50 - ORYZIAS LATIPES (ORANGE-RED KILLIFISH) - 39 MG/L - 96 H (OECD TEST GUIDELINE 203)
TOXICITY TO DAPHNIA AND OTHER AQUATIC INVERTEBRATES TOXICITY TO ALGAE	NOEC - ORYZIAS LATIPES (ORANGE-RED KILLIFISH) - 7.2 MG/L - 14 D (OECD TEST GUIDELINE 204) STATIC TEST EC50 - DAPHNIA MAGNA (WATER FLEA) - 19 MG/L - 48 H (OECD TEST GUIDELINE 202) STATIC TEST ERC50 - DESMODESMUS SUBSPICATUS (GREEN ALGAE) - 48.7 MG/L - 72 H (OECD TEST GUIDELINE 201)
TOXICITY TO BACTERIA	STATIC TEST NOEC - DESMODESMUS SUBSPICATUS (GREEN ALGAE) - 5.1 MG/L - 72 H (OECD TEST GUIDELINE 201) RESPIRATION INHIBITION EC50 - ACTIVATED SLUDGE - 650 MG/L - 3 H (OECD TEST GUIDELINE 209)

PERSISTENCE AND DEGRADABILITY

BIODEGRADABILITY	AEROBIC - EXPOSURE TIME 28 D
	RESULT: 74.3 % - READILY BIODEGRADABLE.
	(OECD TEST GUIDELINE 301F)

BIOACCUMULATIVE POTENTIAL

BIOACCUMULATION	CYPRINUS CARPIO (CARP) - 42 D - 0.2 MG/L(BENZOTHIAZOLE)
	BIOCONCENTRATION FACTOR (BCF): 2.1 - 3 (OECD TEST GUIDELINE 305C)
	CYPRINUS CARPIO (CARP) - 42 D - 0.02 MG/L(BENZOTHIAZOLE)

BIOCONCENTRATION FACTOR (BCF): 4.1 - 7.5 (OECD TEST GUIDELINE 305C)

5.1

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT ANDPBT/VPVB ASSESSMENT NOT AVAILABLE AS**VPVB ASSESSMENT**CHEMICAL SAFETY ASSESSMENT NOT
REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS AN ENVIRONMENTAL HAZARD CANNOT BE EXCLUDED IN THE EVENT OF UNPROFESSIONAL HANDLING OR DISPOSAL. HARMFUL TO AQUATIC LIFE.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT	OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS
	TO A LICENSED DISPOSAL COMPANY. CONTACT A
	LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE
	TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE
	MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN
	IN A CHEMICAL INCINERATOR EQUIPPED WITH AN
	AFTERBURNER AND SCRUBBER.

CONTAMINATED DISPOSE OF AS UNUSED PRODUCT. PACKAGING

SECTION 14. TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP: REPORTABLE QUANTITY (RQ):	TOXIC, LIQUIDS, ORGANIC, N.O.S. (Benzothiazole) 2810 6.1 III
POISON INHALATION HAZARD:	NO
IMDG PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP: EMS-NO:	TOXIC, LIQUIDS, ORGANIC, N.O.S. (Benzothiazole) 2810 6.1 III F-A, S-A
IATA PROPER SHIPPING NAME: UN NUMBER: CLASS: PACKING GROUP:	TOXIC, LIQUIDS, ORGANIC, N.O.S. (Benzothiazole) 2810 6.1 III

SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS	THIS MATERIAL DOES NOT CONTAIN ANY COMPONENTS WITH A SECTION 302 EHS TPQ.
SARA 313 COMPONENTS	THIS MATERIAL DOES NOT CONTAIN ANY CHEMICAL COMPONENTS WITH KNOWN CAS NUMBERS THAT EXCEED THE THRESHOLD (DE MINIMIS) REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313.

SARA 311/312 HAZARDS ACUTE HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
Benzothiazole	95-16-9	

CALIFORNIA PROP. 65 COMPONENTS

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE HARM.

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

H301 + H311	TOXIC IF SWALLOWED OR IN CONTACT WITH SKIN.
H319	CAUSES SERIOUS EYE IRRITATION
H332	HARMFUL IF INHALED.
H402	HARMFUL TO AQUATIC LIFE.

MSDS LEGEND	
MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENENTAL INDUSTRIAL
	HYGINISTS
CAS:	CHEMICAL ABSTRACTS SERIVE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)
IMPORTANT:	

THE INFORMATION ABOVE IS BELIEVED TO BE ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVAILABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO SUCH INFORMATION, AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR PARTICULAR PURPOSES. IN NO EVENT SHALL **CII** BE LIABLE FOR ANY CLAIMS, LOSSES, OR DAMAGES OF ANY THIRD PARTY OR FOR LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF **CII** HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

VERSION: 3.2.

REVISION DATE: 07/01/2020