

# *Chem-Impex International Inc.*

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## SAFETY DATA SHEET

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### SECTION 1. CHEMICAL IDENTIFICATION

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CATALOG #:	32020
NAME:	Iodine monochloride
SYNONYMS:	Chloroiodide
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

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#### CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

#### GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

SKIN CORROSION (CATEGORY 1B), H314

SERIOUS EYE DAMAGE (CATEGORY 1), H318

RESPIRATORY SENSITISATION (CATEGORY 1), H334

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

**GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS  
PICTOGRAM**



SIGNAL WORD

DANGER

**HAZARD STATEMENT(S)**

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE  
H334 MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR  
BREATHING DIFFICULTIES IF INHALED.

**PRECAUTIONARY STATEMENT(S)**

P261 AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/  
SPRAY  
P264 WASH SKIN THOROUGHLY AFTER HANDLING  
P280 WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE  
PROTECTION  
P285 IN CASE OF INADEQUATE VENTILATION WEAR  
RESPIRATORY PROTECTION  
P301 + P330 + P331 IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING  
P303 + P361 + P353 IF ON SKIN (OR HAIR): REMOVE/ TAKE OFF IMMEDIATELY  
ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/  
SHOWER.  
P304 + P340 IF INHALED: REMOVE VICTIM TO FRESH AIR AND KEEP AT  
REST IN A POSITION COMFORTABLE FOR BREATHING.  
P305 + P351 + P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL  
MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND  
EASY TO DO. CONTINUE RINSING.  
P310 IMMEDIATELY CALL A POISON CENTER OR DOCTOR/  
PHYSICIAN.  
P321 SPECIFIC TREATMENT (SEE SUPPLEMENTAL FIRST AID  
INSTRUCTIONS ON THIS LABEL)  
P363 WASH CONTAMINATED CLOTHING BEFORE REUSE.  
P405 STORE LOCKED UP.  
P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED  
WASTE DISPOSAL PLANT.

**HAZARDS NOT  
OTHERWISE  
CLASSIFIED (HNOC)  
OR NOT COVERED  
BY GHS**

NONE

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

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MF: CII  
MW: 162.36

CAS-NO. 7790-99-0  
PURITY: 1.10±0.1 I/Cl ratio basis

**HAZARDOUS COMPONENTS**

COMPONENT	CLASSIFICATION	CONCENTRATION
Iodine monochloride	SKIN CORR. 1B; EYE DAM. 1; RESP. SENS. 1; H314, H334	-

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

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**SECTION 4. FIRST-AID MEASURES**

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**DESCRIPTION OF FIRST AID MEASURES**

<b>GENERAL ADVICE</b>	CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.
<b>IF INHALED</b>	IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.
<b>IN CASE OF SKIN CONTACT</b>	TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF WATER. CONSULT A PHYSICIAN.
<b>IN CASE OF EYE CONTACT</b>	RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.CONTINUE RINSING EYES DURING TRANSPORT TO HOSPITAL.
<b>IF SWALLOWED</b>	DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN
<b>MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED</b>	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11
<b>INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED</b>	NO DATA AVAILABLE

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## **SECTION 5. FIRE AND EXPLOSION DATA**

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### **EXTINGUISHING MEDIA**

**SUITABLE EXTINGUISHING MEDIA** USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

**SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE** HYDROGEN CHLORIDE GAS, HYDROGEN IODIDE

**ADVICE FOR FIREFIGHTERS** WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.

**FURTHER INFORMATION** NO DATA AVAILABLE

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

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**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES** USE PERSONAL PROTECTIVE EQUIPMENT. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS.

**ENVIRONMENTAL PRECAUTIONS** FOR PERSONAL PROTECTION SEE SECTION 8. DO NOT LET PRODUCT ENTER DRAINS.

**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.

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## **SECTION 7. HANDLING AND STORAGE**

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**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.

RECOMMENDED STORAGE TEMPERATURE: Store at 0-8°C

HANDLE AND STORE UNDER INERT GAS

**SPECIFIC END USE(S)** APART FROM THE USES MENTIONED IN SECTION 1.2 NO OTHER SPECIFIC USES ARE STIPULATED

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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### **CONTROL PARAMETERS**

CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES

### **EXPOSURE CONTROLS**

**APPROPRIATE ENGINEERING CONTROLS** HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.

### **PERSONAL PROTECTIVE EQUIPMENT**

**EYE/FACE PROTECTION** TIGHTLY FITTING SAFETY GOGGLES. FACESHIELD (8-INCH MINIMUM). USE EQUIPMENT FOR EYE 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: FLUORINATED RUBBER  
MINIMUM LAYER THICKNESS: 0.7 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED: VITOJECT (KCL 890, SIZE M)

SPLASH CONTACT

MATERIAL: FLUORINATED RUBBER  
MINIMUM LAYER THICKNESS: 0.7 MM  
BREAK THROUGH TIME: 480 MIN  
MATERIAL TESTED: VITOJECT (KCL 890, 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 FULL-FACE 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**

DO NOT LET PRODUCT ENTER DRAINS

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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**INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Dark Reddish to brown Solid/liquid
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	25-27 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT	97.4 °C
AND BOILING RANGE	
FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NO DATA AVAILABLE
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	5.61 - (AIR = 1.0)
RELATIVE DENSITY	3.24
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT: N- OCTANOL/WATER	NO DATA AVAILABLE
AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	NO DATA AVAILABLE

**OTHER SAFETY INFORMATION**

RELATIVE VAPOUR DENSITY	5.61 - (AIR = 1.0)
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**SECTION 10. STABILITY AND REACTIVITY**

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<b>REACTIVITY</b>	NO DATA AVAILABLE
<b>CHEMICAL STABILITY</b>	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
<b>POSSIBILITY OF HAZARDOUS REACTIONS</b>	NO DATA AVAILABLE
<b>CONDITIONS TO AVOID</b>	HEAT.
<b>INCOMPATIBLE MATERIALS</b>	ORGANIC MATERIALS, STRONG BASES, METALS

**HAZARDOUS  
DECOMPOSITION  
PRODUCTS**

OTHER DECOMPOSITION PRODUCTS - NO DATA  
AVAILABLE  
IN THE EVENT OF FIRE: SEE SECTION 5

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**SECTION 11. TOXICOLOGICAL INFORMATION**

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**INFORMATION ON TOXICOLOGICAL EFFECTS**

**ACUTE TOXICITY**

NO DATA AVAILABLE

INHALATION: NO DATA AVAILABLE

DERMAL: NO DATA AVAILABLE

NO DATA AVAILABLE

**SKIN  
CORROSION/IRRITATION**

NO DATA AVAILABLE

**SERIOUS EYE  
DAMAGE/EYE IRRITATION**

NO DATA AVAILABLE

**RESPIRATORY OR SKIN  
SENSITISATION**

NO DATA AVAILABLE

**GERM CELL  
MUTAGENICITY**

NO DATA AVAILABLE

**CARCINOGENICITY**

IARC:

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

ACGIH:

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY ACGIH

NTP:

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A KNOWN OR ANTICIPATED CARCINOGEN BY NTP.

OSHA:

NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL CARCINOGEN BY OSHA.

**REPRODUCTIVE TOXICITY**

EXPOSURE TO EXCESSIVE AMOUNTS OF IODINE DURING PREGNANCY IS CAPABLE OF PRODUCING FETAL HYPOTHYROIDISM. IODINECONTAINING DRUGS HAVE BEEN ASSOCIATED WITH FETAL GOITER.



<b>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</b>	NO DATA AVAILABLE
<b>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</b>	NO DATA AVAILABLE
<b>ASPIRATION HAZARD</b>	NO DATA AVAILABLE
<b>ADDITIONAL INFORMATION</b>	RTECS: NN1650000  MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE OF THE MUCOUS MEMBRANES AND UPPER RESPIRATORY TRACT, EYES, AND SKIN., COUGH, SHORTNESS OF BREATH, HEADACHE, NAUSEA  STOMACH - IRREGULARITIES - BASED ON HUMAN EVIDENCE

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**SECTION 12. ECOLOGICAL INFORMATION**

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<b>TOXICITY</b>	NO DATA AVAILABLE
<b>PERSISTENCE AND DEGRADABILITY</b>	NO DATA AVAILABLE
<b>BIOACCUMULATIVE POTENTIAL</b>	NO DATA AVAILABLE
<b>MOBILITY IN SOIL</b>	NO DATA AVAILABLE
<b>RESULTS OF PBT AND VPVB ASSESSMENT</b>	PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED
<b>OTHER ADVERSE EFFECTS</b>	NO DATA AVAILABLE

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**SECTION 13. DISPOSAL CONSIDERATIONS**

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**WASTE TREATMENT METHODS**

<b>PRODUCT</b>	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.
<b>CONTAMINATED PACKAGING</b>	DISPOSE OF AS UNUSED PRODUCT.

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**SECTION 14. TRANSPORT INFORMATION**

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**DOT (US)**

PROPER SHIPPING NAME:	IODINE MONOCHLORIDE, SOLID (Iodine monochloride)
UN NUMBER:	1792
CLASS:	8
PACKING GROUP:	II
MARINE POLLUTANT:	NO
POISON INHALATION HAZARD:	NO

**IMDG**

PROPER SHIPPING NAME:	IODINE MONOCHLORIDE, SOLID (Iodine monochloride)
UN NUMBER:	1792
CLASS:	8
PACKING GROUP:	II
EMS-NO:	F-A, S-B
MARINE POLLUTANT:	NO

**IATA**

PROPER SHIPPING NAME:	IODINE MONOCHLORIDE, SOLID (Iodine monochloride)
UN NUMBER:	1792
CLASS:	8
PACKING GROUP:	II
IATA PASSENGER:	NOT PERMITTED FOR TRANSPORT

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**SECTION 15. REGULATORY INFORMATION**

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<b>SARA 302 COMPONENTS</b>	NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.
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<b>SARA 313 COMPONENTS</b>	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.
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**SARA 311/312 HAZARDS**

ACUTE HEALTH HAZARD, CHRONIC 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
Iodine monochloride	7790-99-0	03/01/2007

**NEW JERSEY RIGHT TO KNOW COMPONENTS**

	CAS-NO.	REVISION DATE
Iodine monochloride	7790-99-0	03/01/2007

**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

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**SECTION 16. OTHER INFORMATION**

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

EYE DAM.	SERIOUS EYE DAMAGE
H314	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
H318	CAUSES SERIOUS EYE DAMAGE.
H334	MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.
RESP. SENS.	RESPIRATORY SENSITIZATION
SKIN CORR.	SKIN CORROSION

**HMIS RATING**

HEALTH HAZARD:	3
CHRONIC HEALTH HAZARD:	*
FLAMMABILITY:	0
PHYSICAL HAZARD	0

**NFPA RATING**

HEALTH HAZARD:	3
FIRE HAZARD:	0
REACTIVITY HAZARD:	0

**MSDS LEGEND**

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL 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:**

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