

# ***Chem-Impex International Inc.***

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825 Dillon Drive  
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## **SAFETY DATA SHEET**

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### **SECTION 1. CHEMICAL IDENTIFICATION**

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CATALOG #:	28335
NAME:	5-Aminotetrazole
SYNONYMS:	1H-1,2,3,4-tetrazol-5-amine
24 HOUR EMERGENCY TELEPHONE:	(800) 535-5053(USA) 352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER SERVICE:	(630) 766-2112

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### **SECTION 2. HAZARDS IDENTIFICATION**

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#### **CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**

**GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)**  
ACUTE TOXICITY, ORAL (CATEGORY 4), H302  
SKIN IRRITATION (CATEGORY 2), H315  
EYE IRRITATION (CATEGORY 2A), H319  
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (CATEGORY 3),  
RESPIRATORY SYSTEM, H335

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

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



**SIGNAL WORD**

**WARNING**

**HAZARD STATEMENT(S)**

H302 HARMFUL IF SWALLOWED.  
H315 CAUSES SKIN IRRITATION.  
H319 FLAMMABLE SOLID  
H335 MAY CAUSE RESPIRATORY IRRITATION.

**PRECAUTIONARY  
STATEMENT(S)**

P261 AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/  
SPRAY.  
P264 WASH SKIN THOROUGHLY AFTER HANDLING.  
P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS  
PRODUCT.  
P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.  
P280 WEAR PROTECTIVE GLOVES/ EYE PROTECTION/ FACE  
PROTECTION.  
P301 + P312 IF SWALLOWED: CALL A POISON CENTER OR DOCTOR/  
PHYSICIAN IF YOU FEEL UNWELL.  
P302 + P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.  
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.  
P312 CALL A POISON CENTER OR DOCTOR/ PHYSICIAN IF YOU  
FEEL UNWELL.  
P321 SPECIFIC TREATMENT (SEE SUPPLEMENTAL FIRST AID  
INSTRUCTIONS ON THIS LABEL).  
P330 RINSE MOUTH.  
P332 + P313 IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/  
ATTENTION.  
P337 + P313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/  
ATTENTION.  
P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE  
REUSE.  
P403 + P233 STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER  
TIGHTLY CLOSED.  
P405 STORE LOCKED UP.  
P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED  
WASTE DISPOSAL PLANT.

**HAZARDS NOT  
OTHERWISE  
CLASSIFIED (HNOC)**

**NONE**

**OR NOT COVERED  
BY GHS**

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

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MF: CH<sub>3</sub>N<sub>5</sub>

MW: 85.07

CAS-NO. 4418-61-5

PURITY: ≥ 99% (Assay by titration, HPLC)

#### **HAZARDOUS COMPONENTS**

<b>COMPONENT</b>	<b>CLASSIFICATION</b>	<b>CONCENTRATION</b>
<b>5-AMINO-1H-TETRAZOL</b>		
	ACUTE TOX. 4; SKIN IRRIT. 2; EYE IRRIT. 2A; STOT SE 3; H302, H315, H319, H335	-

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>	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.
<b>IF SWALLOWED</b>	NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.
<b>MOST IMPORTANT SYMPTOMS AND</b>	THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11

**EFFECTS, BOTH ACUTE  
AND DELAYED**

**INDICATION OF ANY  
IMMEDIATE MEDICAL  
ATTENTION AND  
SPECIAL TREATMENT  
NEEDED**

NO DATA AVAILABLE

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**SECTION 5. FIRE AND EXPLOSION DATA**

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**EXTINGUISHING MEDIA**

**SUITABLE  
EXTINGUISHING MEDIA**

ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR  
CARBON DIOXIDE.

**SPECIAL HAZARDS  
ARISING FROM THE  
SUBSTANCE OR MIXTURE**

CARBON OXIDES, NITROGEN OXIDES (NOX).  
CLOSED CONTAINERS MAY EXPLODE FROM HEAT OF  
A FIRE.

**ADVICE FOR  
FIREFIGHTERS**

WEAR SELF CONTAINED BREATHING APPARATUS FOR  
FIRE FIGHTING 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  
DUST FORMATION. AVOID BREATHING VAPOURS, MIST  
OR GAS. ENSURE ADEQUATE VENTILATION.  
EVACUATE PERSONNEL TO SAFE AREAS. AVOID  
BREATHING DUST.  
FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL  
PRECAUTIONS**

DO NOT LET PRODUCT ENTER DRAINS.

**METHODS AND  
MATERIALS FOR  
CONTAINMENT AND  
CLEANING UP**

PICK UP AND ARRANGE DISPOSAL WITHOUT  
CREATING DUST. SWEEP UP AND SHOVEL. 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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<b>PRECAUTIONS FOR SAFE HANDLING</b>	AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST AND AEROSOLS. PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED. FOR PRECAUTIONS SEE SECTION 2.2.
<b>CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES</b>	KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. KEEP IN A DRY PLACE.
<b>SPECIFIC END USE(S)</b>	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**

<b>COMPONENTS WITH WORKPLACE CONTROL PARAMETERS</b>	CONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMIT VALUES.
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### **EXPOSURE CONTROLS**

<b>APPROPRIATE ENGINEERING CONTROLS</b>	HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICE. WASH HANDS BEFORE BREAKS AND AT THE END OF WORKDAY.
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### **PERSONAL PROTECTIVE EQUIPMENT**

<b>EYE/FACE PROTECTION</b>	SAFETY GLASSES WITH SIDE-SHIELDS CONFORMING TO EN166 USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).
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<b>SKIN PROTECTION</b>	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.
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<b>BODY PROTECTION</b>	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.
<b>RESPIRATORY PROTECTION</b>	FOR NUISANCE EXPOSURES USE TYPE P95 (US) OR TYPE P1 (EU EN 143) PARTICLE RESPIRATOR.FOR HIGHER LEVEL PROTECTION USE TYPE OV/AG/P99 (US) OR TYPE ABEK-P2 (EU EN 143) RESPIRATOR CARTRIDGES. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).
<b>CONTROL OF ENVIRONMENTAL EXPOSURE</b>	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. 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	White to off-white crystalline powder
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING	200 - 208 °C
POINT/FREEZING POINT	
INITIAL BOILING POINT	
AND BOILING RANGE	
FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE
UPPER/LOWER	NO DATA AVAILABLE
FLAMMABILITY OR	
EXPLOSIVE LIMITS	
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	
WATER SOLUBILITY	NO DATA AVAILABLE
PARTITION COEFFICIENT: N- OCTANOL/WATER	NO DATA AVAILABLE
AUTO-IGNITION	NO DATA AVAILABLE
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

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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>	AVIOD EXCESSIVE HEAT AND LIGHT
<b>INCOMPATIBLE MATERIALS</b>	STRONG ACIDS, ACID CHLORIDES, ACID ANHYDRIDES, STRONG OXIDIZING AGENTS, METALS, BASES
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	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**

<b>ACUTE TOXICITY</b>	INHALATION: NO DATA AVAILABLE DERMAL: NO DATA AVAILABLE
<b>SKIN CORROSION/IRRITATION</b>	NO DATA AVAILABLE
<b>SERIOUS EYE DAMAGE/EYE IRRITATION</b>	NO DATA AVAILABLE
<b>RESPIRATORY OR SKIN SENSITISATION</b>	THE PRECEDING DATA, OR INTERPRETATION OF DATA, WAS DETERMINED USING QUANTITATIVE STRUCTURE ACTIVITY RELATIONSHIP (QSAR)
<b>GERM CELL MUTAGENICITY</b>	NO DATA AVAILABLE
<b>CARCINOGENICITY IARC:</b>	NO COMPONENT OF THIS PRODUCT PRESENT AT LEVELS GREATER THAN OR EQUAL TO 0.1% IS

ACGIH:	IDENTIFIED AS PROBABLE, POSSIBLE OR CONFIRMED HUMAN CARCINOGEN BY IARC. 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.
<b>REPRODUCTIVE TOXICITY</b>	NO DATA AVAILABLE
<b>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE</b>	INHALATION - MAY CAUSE RESPIRATORY IRRITATION.
<b>SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE</b>	NO DATA AVAILABLE
<b>ASPIRATION HAZARD</b>	NO DATA AVAILABLE
<b>ADDITIONAL INFORMATION</b>	RTECS: XF7465000 TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.

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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



**OTHER ADVERSE  
EFFECTS**

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.
<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:	FLAMMABLE SOLIDS, ORGANIC, N.O.S. (5-AMINO-1H-TETRAZOL)
UN NUMBER:	1325
CLASS:	4.1
PACKING GROUP:	III

### **IMDG**

PROPER SHIPPING NAME:	FLAMMABLE SOLIDS, ORGANIC, N.O.S. (5-AMINO-1H-TETRAZOL)
UN NUMBER:	1325
CLASS:	4.1
PACKING GROUP:	III
EMS-NO:	F-A, S-G

### **IATA**

PROPER SHIPPING NAME:	FLAMMABLE SOLIDS, ORGANIC, N.O.S. (5-AMINO-1H-TETRAZOL)
UN NUMBER:	1325
CLASS:	4.1
PACKING GROUP:	III

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## **SECTION 15. REGULATORY INFORMATION**

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<b>SARA 302 COMPONENTS</b>	SARA 302: NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.	
<b>SARA 313 COMPONENTS</b>	SARA 313: 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.	
<b>SARA 311/312 HAZARDS</b>	FIRE HAZARD, ACUTE HEALTH HAZARD	
<b>MASSACHUSETTS RIGHT TO KNOW COMPONENTS</b>	NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.	
<b>PENNSYLVANIA RIGHT TO KNOW COMPONENTS</b>		
	CAS-NO.	REVISION DATE
5-Aminotetrazole	4418-61-5	
<b>NEW JERSEY RIGHT TO KNOW COMPONENTS</b>		
	CAS-NO.	REVISION DATE
5-Aminotetrazole	4418-61-5	
<b>CALIFORNIA PROP. 65 COMPONENTS</b>	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.

ACUTE TOX.	ACUTE TOXICITY
EYE IRRIT.	EYE IRRITATION
H302	HARMFUL IF SWALLOWED.
H315	CAUSES SKIN IRRITATION.
H319	CAUSES SERIOUS EYE IRRITATION.
H335	MAY CAUSE RESPIRATORY IRRITATION.
SKIN IRRIT.	SKIN IRRITATION

### HMIS RATING

HEALTH HAZARD:	2
CHRONIC HEALTH HAZARD:	
FLAMMABILITY:	0
PHYSICAL HAZARD	4

### NFPA RATING

HEALTH HAZARD:	2
FIRE HAZARD:	0
REACTIVITY HAZARD:	4

MSDS LEGEND

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
CAS:	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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