# Chem-Impex International Inc.

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### SAFETY DATA SHEET

### SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 29815

NAME: Chromium(III) Nitrate Nonahydrate

SYNONYMS:

24 HOUR EMERGENCY (800) 535-5053(USA)

TELEPHONE:

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)

OXIDIZING SOLIDS (CATEGORY 3), H272 SKIN IRRITATION (CATEGORY 2), H315 EYE IRRITATION (CATEGORY 2A), H319 SKIN SENSITISATION (SUB-CATEGORY 1B), H317 SHORT-TERM (ACUTE) AQUATIC HAZARD (CATEGORY 3), H402 LONG-TERM (CHRONIC) AQUATIC HAZARD (CATEGORY 3), H412

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)

H272 MAY INTENSIFY FIRE; OXIDIZER.

H315 CAUSES SKIN IRRITATION.

H317 MAY CAUSE AN ALLERGIC SKIN REACTION.

H319 CAUSES SERIOUS EYE IRRITATION.

H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

#### PRECAUTIONARY STATEMENT(S)

P210 KEEP AWAY FROM HEAT.

P220 KEEP/STORE AWAY FROM CLOTHING/ COMBUSTIBLE

MATERIALS.

P221 TAKE ANY PRECAUTION TO AVOID MIXING WITH

COMBUSTIBLES.

P261 AVOID BREATHING DUST/ FUME/ GAS/ MIST/ VAPOURS/

SPRAY.

P264 WASH SKIN THOROUGHLY AFTER HANDLING.

P272 CONTAMINATED WORK CLOTHING MUST NOT BE

ALLOWED OUT OF THE WORKPLACE.

P273 AVOID RELEASE TO THE ENVIRONMENT.

P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE

PROTECTION/ FACE PROTECTION.

P302 + P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER.

P305 + P351 + P338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL

MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND

EASY TO DO. CONTINUE RINSING.

P333 + P313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL

ADVICE/ ATTENTION.

P337 + P313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/

ATTENTION.

P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE

REUSE.

P370 + P378 IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR

ALCOHOL-RESISTANT FOAM FOR EXTINCTION.

P501 DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED

WASTE DISPOSAL PLANT.

HAZARDS NOT NONE

**OTHERWISE** 

CLASSIFIED (HNOC) OR NOT COVERED

BY GHS

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF: Cr(NO3)3

9H2O

MW: 400.15

CAS-NO. 7789-02-8

PURITY:  $\geq 99\%$  (Assay)

### HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION					
Chromium(III) Nitrate Nonahydrate							
	OX. SOL. 3; SKIN IRRIT. 2; EYE	<= 100%					
	IRRIT. 2A; SKIN SENS. 1B;						
	AQUATIC ACUTE 3; AQUATIC						
	CHRONIC 3; H272, H315, H319,						
	H317, H402, H412						

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 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 WASH OFF WITH SOAP AND PLENTY OF WATER.

**CONTACT** CONSULT A PHYSICIAN.

IN CASE OF EYE RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT

**CONTACT** 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 NO DATA AVAILABLE

### SECTION 5. FIRE AND EXPLOSION DATA

**EXTINGUISHING MEDIA** 

SUITABLE SUITABLE EXTINGUISHING MEDIA

**EXTINGUISHING MEDIA** DRY POWDER DRY SAND

UNSUITABLE EXTINGUISHING MEDIA

FOR THIS SUBSTANCE/MIXTURE NO LIMITATIONS OF

EXTINGUISHING AGENTS ARE GIVEN.

**SPECIAL HAZARDS** NITROGEN OXIDES (NOX), CHROMIUM OXIDES

ARISING FROM THE NOT COMBUSTIBLE. SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF-CONTAINED BREATHING APPARATUS FOR

**FIREFIGHTERS** FIREFIGHTING IF NECESSARY.

**FURTHER INFORMATION** USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONALUSE PERSONAL PROTECTIVE EQUIPMENT. AVOIDPRECAUTIONS,DUST FORMATION. AVOID BREATHING VAPOURS, MISTPROTECTIVEOR GAS. ENSURE ADEQUATE VENTILATION.

EQUIPMENT AND EVACUATE PERSONNEL TO SAFE AREAS. AVOID

**EMERGENCY** BREATHING DUST. **PROCEDURES** 

FOR PERSONAL PROTECTION SEE SECTION 8.

**ENVIRONMENTAL** PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE **PRECAUTIONS** TO DO SO. DO NOT LET PRODUCT ENTER DRAINS.

DISCHARGE INTO THE ENVIRONMENT MUST BE

AVOIDED.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP SWEEP UP AND SHOVEL. CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET-BRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE SECTION 13). 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 FORMATION OF DUST AND AEROSOLS.FURTHER PROCESSING OF SOLID MATERIALS MAY RESULT IN THE FORMATION OF COMBUSTIBLE DUSTS. THE POTENTIAL FOR COMBUSTIBLE DUST FORMATION SHOULD BE TAKEN INTO CONSIDERATION BEFORE

ADDITIONAL PROCESSING OCCURS.

PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED.KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.KEEP AWAY

FROM HEAT AND SOURCES OF IGNITION. FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND

WELL-VENTILATED PLACE.

Store a RT

**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

COMPONENT	CAS-NO.	VALUE	CONTROL	BASIS
			PARAMETERS	
Chromium(III) Nitrate	7789-02-8	TWA	0.5 MG/M3	USA. OCCUPATIONAL
Nonahydrate				EXPOSURE LIMITS (OSHA) -
				TABLE Z-1 LIMITS FOR AIR
				CONTAMINANTS
		TWA	0.5 MG/M3	USA. NIOSH
				RECOMMENDED
				EXPOSURE LIMITS

REMARKS	CHROMIUM(III) COMPOUNDS INCLUDE SOLUBLE CHROMIC SALTS. SEE APPENDIX C		
	PEL		CALIFORNIA PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS
	SEE SECTIONS 1532.2, 5206 & 8359		

#### **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** 

FACE SHIELD AND SAFETY GLASSES 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: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

**BREAK THROUGH TIME: 480 MIN** 

MATERIAL TESTED: DERMATRIL (KCL 740, SIZE M)

SPLASH CONTACT

MATERIAL: NITRILE RUBBER

MINIMUM LAYER THICKNESS: 0.11 MM

**BREAK THROUGH TIME: 480 MIN** 

MATERIAL TESTED: DERMATRIL (KCL 740, 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.

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORY **PROTECTION** 

RESPIRATORS ARE APPROPRIATE USE A FULLFACE

PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (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** PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO

**ENVIRONMENTAL** DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE **EXPOSURE** 

AVOIDED.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Dark purple to black crystalline chunks

OF NITRIC ACID **ODOUR** ODOUR THRESHOLD NO DATA AVAILABLE 2 - 3 AT 50 G/L AT 20 C PH

**MELTING** 59 - 60 °C

POINT/FREEZING POINT INITIAL BOILING POINT AND BOILING RANGE

FLASH POINT

**EVAPORATION RATE** NO DATA AVAILABLE

FLAMMABILITY (SOLID, THE PRODUCT IS NOT FLAMMABLE.

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR

EXPLOSIVE LIMITS

VAPOUR PRESSURE NO DATA AVAILABLE VAPOUR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY

810 G/L AT 20 C - SOLUBLE WATER SOLUBILITY

PARTITION COEFFICIENT: NOT APPLICABLE FOR INORGANIC SUBSTANCES

N- OCTANOL/WATER

NO DATA AVAILABLE **AUTO-IGNITION** 

**TEMPERATURE** 

DECOMPOSITION > 100 C - ELIMINATION OF WATER OF

**CRYSTALLISATION TEMPERATURE** VISCOSITY NO DATA AVAILABLE EXPLOSIVE PROPERTIES

NO DATA AVAILABLE

**OXIDIZING PROPERTIES** 

THE SUBSTANCE OR MIXTURE IS CLASSIFIED AS

OXIDIZING WITH THE CATEGORY 3.

OTHER SAFETY INFORMATION

SOLUBILITY IN OTHER

ETHANOL AT 20 C - SOLUBLE

**SOLVENTS** 

### 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 HEAT

INCOMPATIBLE MATERIALS

ORGANIC MATERIALS, REDUCING AGENTS

HAZARDOUS DECOMPOSITION PRODUCTS HAZARDOUS DECOMPOSITION PRODUCTS FORMED UNDER FIRE CONDITIONS. - NITROGEN OXIDES (NOX),

**CHROMIUM 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 - MALE AND FEMALE - 3,250 MG/KG

(OECD TEST GUIDELINE 401)

INHALATION: NO DATA AVAILABLE

DERMAL: NO DATA AVAILABLE

NO DATA AVAILABLE

**SKIN** NO DATA AVAILABLE

**CORROSION/IRRITATION** 

SERIOUS EYE NO DATA AVAILABLE DAMAGE/EYE IRRITATION

**RESPIRATORY OR SKIN** MAXIMISATION TEST - GUINEA PIG

SENSITISATION RESULT: POSITIVE

THE PRODUCT IS A SKIN SENSITISER, SUB-CATEGORY

1B.

(OECD TEST GUIDELINE 406)

**GERM CELL** REVERSE MUTATION ASSAY **MUTAGENICITY** SALMONELLA TYPHIMURIUM

RESULT: NEGATIVE

THE VALUE IS GIVEN IN ANALOGY TO THE

FOLLOWING SUBSTANCES:

SISTER CHROMATID EXCHANGE ASSAY CHINESE HAMSTER OVARY CELLS

**RESULT: NEGATIVE** 

THE VALUE IS GIVEN IN ANALOGY TO THE FOLLOWING SUBSTANCES: MUTAGENICITY

(MAMMAL CELL TEST): CHROMOSOME ABERRATION.

**RESULT: NEGATIVE** 

THE VALUE IS GIVEN IN ANALOGY TO THE

FOLLOWING SUBSTANCES: OECD TEST GUIDELINE

474

MOUSE - MALE RESULT: NEGATIVE

**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. 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 ON OSHA S LIST OF REGULATED CARCINOGENS.

REPRODUCTIVE TOXICITY NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN** 

**TOXICITY - SINGLE** 

**EXPOSURE** 

NTP:

NO DATA AVAILABLE

**SPECIFIC TARGET ORGAN** 

**TOXICITY - REPEATED** 

**EXPOSURE** 

NO DATA AVAILABLE

**ASPIRATION HAZARD** NO DATA AVAILABLE

ADDITIONAL INFORMATION

RTECS: GB6300000

TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND TOXICOLOGICAL PROPERTIES HAVE

NOT BEEN THOROUGHLY INVESTIGATED.

STOMACH - IRREGULARITIES - BASED ON HUMAN

**EVIDENCE** 

#### SECTION 12. ECOLOGICAL INFORMATION

**TOXICITY** 

TOXICITY TO FISH STATIC TEST LC50 - TROUT - 20.1 MG/L - 96 H

(OECD TEST GUIDELINE 203)

FLOW-THROUGH TEST LC50 - ONCORHYNCHUS MYKISS (RAINBOW TROUT) - 24.1 MG/L - 96 H

(OECD TEST GUIDELINE 203)

TOXICITY TO DAPHNIA AND

OTHER AQUATIC INVERTEBRATES

EC50 - DAPHNIA MAGNA (WATER FLEA) - 76.9 - 268.6

MG/L - 48 H

PERSISTENCE AND DEGRADABILITY

THE METHODS FOR DETERMINING THE BIOLOGICAL

DEGRADABILITY ARE NOT APPLICABLE TO

INORGANIC SUBSTANCES.

BIOACCUMULATIVE

**POTENTIAL** 

NO DATA AVAILABLE

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND

VPVB ASSESSMENT

PBT/VPVB ASSESSMENT NOT AVAILABLE AS

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 WITH LONG LASTING

EFFECTS.

### SECTION 13. DISPOSAL CONSIDERATIONS

PRODUCT OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS

TO A LICENSED DISPOSAL COMPANY. BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS

MATERIAL.

CONTAMINATED PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

### **SECTION 14.** TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: CHROMIUM NITRATE

UN NUMBER: 2720 CLASS: 5.1 PACKING GROUP: III

REPORTABLE QUANTITY

(RQ):

POISON INHALATION NO

HAZARD:

**IMDG** 

PROPER SHIPPING NAME: CHROMIUM NITRATE

UN NUMBER: 2720
CLASS: 5.1
PACKING GROUP: III
EMS-NO: F-A, S-Q

**IATA** 

PROPER SHIPPING NAME: CHROMIUM NITRATE

UN NUMBER: 2720 CLASS: 5.1 PACKING GROUP: III

### SECTION 15. REGULATORY INFORMATION

SARA 302 COMPONENTS NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO

THE REPORTING REQUIREMENTS OF SARA TITLE III,

SECTION 302.

**SARA 313 COMPONENTS** 

THE FOLLOWING COMPONENTS ARE SUBJECT TO REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313:

CAS-NO. REVISION DATE

Chromium(III) Nitrate

Nonahydrate

7789-02-8 03-01-2007

**SARA 311/312 HAZARDS** REACTIVITY HAZARD, ACUTE HEALTH HAZARD,

CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHTNO COMPONENTS ARE SUBJECT TO THETO KNOW COMPONENTSMASSACHUSETTS RIGHT TO KNOW ACT.

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS-NO. REVISION DATE

Chromium(III) Nitrate

Nonahydrate

7789-02-8 03-01-2007

### SECTION 16. OTHER INFORMATION

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

H272 MAY INTENSIFY FIRE; OXIDIZER.

H315 CAUSES SKIN IRRITATION.

H317 MAY CAUSE AN ALLERGIC SKIN REACTION.

H319 CAUSES SERIOUS EYE IRRITATION.

H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING

EFFECTS.

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:

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