# Chem-Impex International Inc.

Tel: (630) 766-2112
E-mail: sales@chemimpex.com
Shipping and Correspondence:
935 Dillon Drive
Wood Dale, IL 60191 USA

Fax: (630) 766-2218
Web site: www.chemimpex.com
Manufacturing site:
825 Dillon Drive
Wood Dale, IL 60191 USA

# SAFETY DATA SHEET

## SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #: 00328

NAME: Ammonium oxalate monohydrate

SYNONYMS: Oxalic acid diammonium salt monohydrate

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 4), H302 ACUTE TOXICITY, DERMAL (CATEGORY 4), H312 SKIN CORROSION (CATEGORY 1B), H314 SERIOUS EYE DAMAGE (CATEGORY 1), H318 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)

H302 + H312 HARMFUL IF SWALLOWED OR IN CONTACT

WITH SKIN

H314 CAUSES SEVERE SKIN BURNS AND EYE

DAMAGE.

PRECAUTIONARY STATEMENT(S)

P260 DO NOT BREATHE DUST OR MIST.

P264 WASH SKIN THOROUGHLY AFTER HANDLING. P270 DO NOT EAT, DRINK OR SMOKE WHEN USING

THIS PRODUCT.

P280 WEAR PROTECTIVE GLOVES/ PROTECTIVE

CLOTHING/ EYE PROTECTION/ FACE

PROTECTION.

P301 + P312 IF SWALLOWED: CALL A POISON CENTER OR

DOCTOR/ PHYSICIAN IF YOU FEEL UNWELL.

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.

P322 SPECIFIC MEASURES (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 NONE

**OTHERWISE** 

CLASSIFIED (HNOC) OR NOT COVERED

BY GHS

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:  $C_2H_8N_2O_4\cdot H_2O$ 

MW: 142.11

CAS-NO. 6009-70-7

**PURITY**: 99.0-101.0% (Titration)

#### HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION		
Ammonium oxalate monohydrate				
	ACUTE TOX. 4; SKIN CORR.	-		
	1B; EYE DAM. 1; H302 + H312,			
	H314			

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

# SECTION 4. FIRST-AID MEASURES

		0 T TTT 0 T 1 T	
DESCR	RIPTION	OF FIRST AL	D MEASURES

CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA GENERAL ADVICE

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.

TAKE OFF CONTAMINATED CLOTHING AND SHOES IN CASE OF SKIN

CONTACT IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF

WATER. CONSULT A PHYSICIAN.

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

CONTACT LEAST 15 MINUTES AND CONSULT A

PHYSICIAN.CONTINUE RINSING EYES DURING

TRANSPORT TO HOSPITAL.

IF SWALLOWED DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING

> BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT THE MOST IMPORTANT KNOWN SYMPTOMS AND SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE

EFFECTS, BOTH ACUTE SECTION 2.2) AND/OR IN SECTION 11

AND DELAYED

NO DATA AVAILABLE INDICATION OF ANY IMMEDIATE MEDICAL

ATTENTION AND SPECIAL TREATMENT NEEDED

#### SECTION 5. FIRE AND EXPLOSION DATA

**EXTINGUISHING MEDIA** 

SUITABLE EXTINGUISHING USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY

MEDIA CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS CARBON OXIDES, NITROGEN OXIDES (NOX)

ARISING FROM THE

SUBSTANCE OR MIXTURE

ADVICE FOR WEAR SELF CONTAINED BREATHING APPARATUS FOR

FIREFIGHTERS FIRE FIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

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 DO NOT LET PRODUCT ENTER DRAINS.

PRECAUTIONS

METHODS AND PICK UP AND ARRANGE DISPOSAL WITHOUT

MATERIALS FOR CREATING DUST. SWEEP UP AND SHOVEL. KEEP IN CONTAINMENT AND SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

**CLEANING UP** 

REFERENCE TO OTHER FOR DISPOSAL SEE SECTION 13.

**SECTIONS** 

# SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE AVOID CONTACT WITH SKIN AND EYES. AVOID

HANDLING FORMATION OF DUST AND AEROSOLS.

PROVIDE APPROPRIATE EXHAUST VENTILATION AT

PLACES WHERE DUST IS FORMED.

FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE

STORAGE, INCLUDING

ANY INCOMPATIBILITIES

SPECIFIC END USE(S)

KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE. MOISTURE SENSITIVE.

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.

#### **EXPOSURE CONTROLS**

APPROPRIATE HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL ENGINEERING HYGIENE AND SAFETY PRACTICE. WASH HANDS CONTROLS 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.

RESPIRATORY PROTECTION

WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE 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).

DO NOT LET PRODUCT ENTER DRAINS.

CONTROL OF ENVIRONMENTAL

EXPOSURE

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE White crystalline powder
ODOUR NO DATA AVAILABLE
ODOUR THRESHOLD NO DATA AVAILABLE
PH 6.0 - 7.0 AT 14.2 G/L AT 25 C

MELTING 128 °C (dec.) (Approx.)

POINT/FREEZING POINT

BOILING POINT FLASH POINT

EVAPOURATION RATE NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE

GAS)

UPPER/LOWER NO DATA AVAILABLE

FLAMMABILITY OR EXPLOSIVE LIMITS

VAPOUR PRESSURE NO DATA AVAILABLE VAPOUR DENSITY NO DATA AVAILABLE

RELATIVE DENSITY

WATER SOLUBILITY CA.14.2 G/L AT 20 C PARTITION COEFFICIENT: NO DATA AVAILABLE

N- OCTANOL/WATER

AUTO-IGNITION NO DATA AVAILABLE

TEMPERATURE

DECOMPOSITION NO DATA AVAILABLE

TEMPERATURE

VISCOSITY

EXPLOSIVE PROPERTIES

OXIDIZING PROPERTIES

OTHER SAFETY

NO DATA AVAILABLE

NO DATA AVAILABLE

NO DATA AVAILABLE

NO DATA AVAILABLE

**INFORMATION** 

#### SECTION 10. STABILITY AND REACTIVITY

REACTIVITY NO DATA AVAILABLE

CHEMICAL STABILITY STABLE UNDER RECOMMENDED STORAGE

CONDITIONS.

POSSIBILITY OF NO DATA AVAILABLE

HAZARDOUS REACTIONS

CONDITIONS TO AVOID NO DATA AVAILABLE

INCOMPATIBLE **MATERIALS** 

STRONG OXIDIZING AGENTS, STRONG ACIDS

OTHER DECOMPOSITION PRODUCTS - NO DATA **HAZARDOUS** DECOMPOSITION AVAILABLE

**PRODUCTS** IN THE EVENT OF FIRE: SEE SECTION 5

#### SECTION 11. TOXICOLOGICAL INFORMATION

### INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY NO DATA AVAILABLE

INHALATION: NO DATA AVAILABLE

NO DATA AVAILABLE

**SKIN** NO DATA AVAILABLE

CORROSION/IRRITATION

NO DATA AVAILABLE **SERIOUS EYE** 

DAMAGE/EYE IRRITATION

RESPIRATORY OR SKIN NO DATA AVAILABLE

**SENSITISATION** 

GERM CELL NO DATA AVAILABLE

MUTAGENICITY

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.

NO COMPONENT OF THIS PRODUCT PRESENT AT OSHA:

> LEVELS GREATER THAN OR EOUAL TO 0.1% IS IDENTIFIED AS A CARCINOGEN OR POTENTIAL

CARCINOGEN BY OSHA.

REPRODUCTIVE TOXICITY

NO DATA AVAILABLE NO DATA AVAILABLE

SPECIFIC TARGET ORGAN

NO DATA AVAILABLE

**TOXICITY - SINGLE** 

**EXPOSURE** 

SPECIFIC TARGET ORGAN

NO DATA AVAILABLE

TOXICITY - REPEATED

**EXPOSURE** 

ASPIRATION HAZARD NO DATA AVAILABLE ADDITIONAL RTECS: NOT AVAILABLE

INFORMATION COUGH, SHORTNESS OF BREATH, HEADACHE,

NAUSEA, VOMITING

#### **SECTION 12. ECOLOGICAL INFORMATION**

TOXICITY NO DATA AVAILABLE PERSISTENCE AND NO DATA AVAILABLE

**DEGRADABILITY** 

BIOACCUMULATIVE NO DATA AVAILABLE

**POTENTIAL** 

MOBILITY IN SOIL NO DATA AVAILABLE

RESULTS OF PBT AND VPVB PBT/VPVB ASSESSMENT NOT AVAILABLE AS

ASSESSMENT CHEMICAL SAFETY ASSESSMENT NOT

REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS NO DATA AVAILABLE

# 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 PACKAGING

DISPOSE OF AS UNUSED PRODUCT.

# **SECTION 14.** TRANSPORT INFORMATION

DOT (US)

PROPER SHIPPING NAME: CORROSIVE SOLIDS, N.O.S. (Ammonium oxalate

monohydrate)

UN NUMBER: 1759 CLASS: 8 PACKING GROUP: III

REPORTABLE QUANTITY 5000 LBS

(RQ):

MARINE POLLUTANT: NO POISON INHALATION NO

HAZARD: **IMDG** 

PROPER SHIPPING NAME: CORROSIVE SOLID, N.O.S. (Ammonium oxalate

monohydrate)

UN NUMBER: 1759 CLASS: 8 PACKING GROUP: Ш EMS-NO: F-A, S-B MARINE POLLUTANT: NO

**IATA** 

CORROSIVE SOLID, N.O.S. (Ammonium oxalate PROPER SHIPPING NAME:

monohydrate)

UN NUMBER: 1759 CLASS: 8 PACKING GROUP: Ш

#### REGULATORY INFORMATION **SECTION 15.**

**SARA 302 COMPONENTS** SARA 302: NO CHEMICALS IN THIS MATERIAL ARE

SUBJECT TO THE REPORTING REQUIREMENTS OF SARA

TITLE III, SECTION 302.

SARA 313: THIS MATERIAL DOES NOT CONTAIN ANY **SARA 313 COMPONENTS** 

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

> **REVISION DATE** CAS#

Ammonium oxalate 6009-70-7 4/24/1993

monohydrate

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

CAS# **REVISION DATE** 

Ammonium oxalate 6009-70-7 4/24/1993

monohydrate

NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS# **REVISION DATE** 

Ammonium oxalate 6009-70-7 4/24/1993

monohydrate

THIS PRODUCT DOES NOT CONTAIN ANY CHEMICALS CALIFORNIA PROP. 65

KNOWN TO STATE OF CALIFORNIA TO CAUSE CANCER, **COMPONENTS** 

BIRTH DEFECTS, OR ANY OTHER REPRODUCTIVE

HARM.

#### SECTION 16. OTHER INFORMATION

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

ACUTE TOX. **ACUTE TOXICITY**  EYE DAM. SERIOUS EYE DAMAGE H302 HARMFUL IF SWALLOWED.

H302 + H312 HARMFUL IF SWALLOWED OR IN CONTACT WITH SKIN

H312 HARMFUL IN CONTACT WITH SKIN.

H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

**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 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.