Safety Data Sheet
acc. to OSHA HCS

Printing date 06/17/2016 Reviewed on 06/17/2016

1 Identification

· **Product identifier**

· **Trade name: Oxalic Acid**

· **Article number:** 2236 JLM
· **CAS Number:**
144-62-7
· **EC number:**
205-634-3
· **Index number:**
607-006-00-8

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**
Jamson Laboratories, Inc.
101 South Bayview Blvd.
Oldsmar, FL 34677
USA

· **Information department:** Product Safety Department
· **Emergency telephone number:** ChemTel Inc. (800) 255-3924 Intl. +01 (813) 248-0585

2 Hazard(s) identification

· **Classification of the substance or mixture**

GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H312 Harmful in contact with skin.

· **Label elements**
· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**
oxalic acid
· **Hazard statements**
H302+H312 Harmful if swallowed or in contact with skin.
· **Precautionary statements**
P280 Wear protective gloves / protective clothing.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P321 Specific treatment (see on this label).
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/17/2016 Reviewed on 06/17/2016

Trade name: Oxalic Acid

(Contd. of page 1)

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**

Health = 2
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

Health = 2
Fire = 0
Reactivity = 0

· **Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
144-62-7 oxalic acid
· **Identification number(s)**
· **EC number:** 205-634-3
· **Index number:** 607-006-00-8

4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Rub in Ca-gluconate solution or Ca-gluconate gel immediately.
Immediately rinse with water.
· **After eye contact:** Remove contact lenses if able to do so.
· **After swallowing:**
Drink large amounts of calcium based antacid followed by milk of magnesia or milk.
Rinse out mouth and then drink plenty of water.
A person vomiting while lying on their back should be turned onto their side.
Immediately call a doctor.
· **Information for doctor:**
· **Most important symptoms and effects, both acute and delayed**
Nausea
Cramp
Gastric or intestinal disorders
· **Indication of any immediate medical attention and special treatment needed**
Administer Milk of Magnesia or Milk and other non-alcoholic liquids as available. DO NOT INDUCE VOMITING!

(Contd. on page 3)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Oxalic Acid

(Contd. of page 2)

Medical supervision for at least 48 hours.

5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
· **Special hazards arising from the substance or mixture** *Carbon monoxide (CO)*
· **Advice for firefighters**
· **Protective equipment:** *No special measures required.*

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures** *Not required.*
· **Environmental precautions:** *Do not allow undiluted product to enter storm sewers/surface or ground water.*
· **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
· **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Use appropriate industrial vacuum cleaners or central vacuum systems for dust removal.
· **Information about protection against explosions and fires:** *No special measures required.*

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** *No special requirements.*
· **Information about storage in one common storage facility:** *Store away from foodstuffs.*
· **Further information about storage conditions:** *None.*
· **Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** *No further data; see item 7.*

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**	
144-62-7 oxalic acid	
PEL	*Long-term value: 1 mg/m³*
REL	*Short-term value: 2 mg/m³* *Long-term value: 1 mg/m³*
TLV	*Short-term value: 2 mg/m³* *Long-term value: 1 mg/m³* *anhydrous and dihydrate*

(Contd. on page 4)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/17/2016 Reviewed on 06/17/2016

Trade name: Oxalic Acid

(Contd. of page 3)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
· **Breathing equipment:** Not necessary if room is well-ventilated.
· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **Material of gloves**
Neoprene gloves
PVC or PE gloves
Plastic gloves
Nitrile rubber, NBR
Rubber gloves
Butyl rubber, BR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· **Eye protection:** Not required.
· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	Crystalline powder
Color:	White
· **Odor:**	Odorless
· **Odor threshold:**	Not determined.
· **pH-value:**	Not applicable.
· **Change in condition**	
Melting point/Melting range:	189.5 °C (373 °F)
Boiling point/Boiling range:	>100 subl °C (>212 subl °F)
· **Flash point:**	Not applicable.
· **Flammability (solid, gaseous):**	Product is not flammable.

(Contd. on page 5)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/17/2016 Reviewed on 06/17/2016

Trade name: Oxalic Acid

(Contd. of page 4)

· **Ignition temperature:**	
Decomposition temperature:	Not determined.
· **Auto igniting:**	Not determined.
· **Danger of explosion:**	Product does not present an explosion hazard.
· **Explosion limits:**	
Lower:	Not determined.
Upper:	Not determined.
· **Vapor pressure at 40 °C (104 °F):**	0.4 hPa
· **Density at 20 °C (68 °F):**	1.901 g/cm³ (15.864 lbs/gal)
· **Relative density**	Not determined.
· **Vapor density**	Not applicable.
· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with**	
Water at 20 °C (68 °F):	95 g/l
· **Partition coefficient (n-octanol/water):**	Not determined.
· **Viscosity:**	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· **Solvent content:**	
Organic solvents:	0.0 %
VOC content:	0.0 g/l / 0.00 lb/gl
Solids content:	100.0 %
· **Other information**	No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
· **Possibility of hazardous reactions**
Reacts with strong alkali.
Reacts with metals forming hydrogen.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:** No further relevant information available.
· **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**		
144-62-7 oxalic acid		
Oral	LD50	375 mg/kg (rat)

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Oxalic Acid

(Contd. of page 5)

· **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritating effect.
· **Sensitization:** No sensitizing effects known.
· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**
Substance is not listed.

· **NTP (National Toxicology Program)**
Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**
Substance is not listed.

12 Ecological information

· **Toxicity** Toxicity to daphnia and other aquatic invertebrates: 48 h EC50 Daphnia:137 mg/ml.
· **Aquatic toxicity:** No further relevant information available.
· **Persistence and degradability** No further relevant information available.
· **Behavior in environmental systems:**
· **Bioaccumulative potential** No further relevant information available.
· **Mobility in soil** this product is water soluble and will move readily in soil and water
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Dilute concentrate with water and neutralize afterwards with suitable alkali material (sodium hydroxide solution, lime). The formed neutral salts are relatively environment-friendly.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**
· **Recommendation:** Disposal must be made according to official regulations.
· **Recommended cleansing agent:**
Diluted caustic solution
Water, if necessary with cleansing agents.

14 Transport information

· **UN-Number**
· **DOT** Not regulated

(Contd. on page 7)

Safety Data Sheet
acc. to OSHA HCS

Printing date 06/17/2016 Reviewed on 06/17/2016

Trade name: Oxalic Acid

(Contd. of page 6)

· **UN proper shipping name**	
· **DOT**	Not regulated
· **Transport hazard class(es)**	
· **DOT**	Not applicable
· **Packing group**	
· **DOT**	Not applicable
· **Environmental hazards:**	Not applicable.
· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**	Not applicable.
· **UN "Model Regulation":**	Not regulated

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
· **Sara**

· **Section 355 (extremely hazardous substances):**
Substance is not listed.

· **Section 313 (Specific toxic chemical listings):**
Substance is not listed.

· **TSCA (Toxic Substances Control Act):**
Substance is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**
Substance is not listed.

· **Chemicals known to cause reproductive toxicity for females:**
Substance is not listed.

· **Chemicalsknown to cause reproductive toxicity for males.**
Substance is not listed.

· **Chemicals known to cause developmental toxicity:**
Substance is not listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**
Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**
Substance is not listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**
Substance is not listed.

· **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 8)

Safety Data Sheet
acc. to OSHA HCS

Trade name: Oxalic Acid

(Contd. of page 7)

· **Hazard pictograms**

GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**
oxalic acid
· **Hazard statements**
H302+H312 Harmful if swallowed or in contact with skin.
· **Precautionary statements**
P280 Wear protective gloves / protective clothing.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P321 Specific treatment (see on this label).
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environment protection department.
· **Date of preparation / last revision** 06/17/2016 / -
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Acute Tox. 4: Acute toxicity – Category 4