1 Identification

Product identifier

Product name: Potassium oxalate monohydrate

Stock number: 13452
CAS Number: 6487-48-5
EC number: 209-506-8
Index number: 607-007-00-3

Relevant identified uses of the substance or mixture and uses advised against.

Identified use: SU24  Scientific research and development

2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)

GHS07
Acute Tox. 4 H302 Harmful if swallowed.
Acute Tox. 4 H312 Harmful in contact with skin.

Hazards not otherwise classified: No information known.

Label elements

GHS label elements: The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms

GHS07

Signal word Warning

Hazard statements
H302+H312 Harmful if swallowed or in contact with skin.

Precautionary statements
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/…/if you feel unwell.
P312 Call a POISON CENTER/doctor/…/if you feel unwell.
P336 Wash contaminated clothing before reuse.
P322 Specific measures (see on this label).
P363 Wash hands after handling.

WHMIS classification: Not controlled

Classification system
HMIS ratings (scale 0-4)
(Hazardous Materials Identification System)

Health (acute effects) = 2
Flammability = 1
Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Substances

CAS# Description:
6487-48-5 Potassium oxalate monohydrate
Identification number(s):
EC number: 209-506-8
Index number: 607-007-00-3

4 First-aid measures

Description of first aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

After skin contact
Immediately wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

After eye contact
Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing
Seek medical treatment.

Information for doctor
Most important symptoms and effects, both acute and delayed: No further relevant information available.

(Contd. on page 2)
5 Fire-fighting measures
Indication of any immediate medical attention and special treatment needed No further relevant information available.

5.1 Extinguishing media
Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Suitable extinguishing agents

Special hazards arising from the substance or mixture
Carbon monoxide and carbon dioxide
Potassium oxide

Advice for firefighters

Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.

Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.

6.2 Methods and material for containment and cleaning up
Dispose of contaminated material as waste according to section 13.

6.3 Prevention of secondary hazards
No special measures required.

7 Handling and storage

7.1 Handling
Precautions for safe handling
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.

Information about protection against explosions and fires: No information known.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: No special requirements.

Further information about storage conditions:

Store away from oxidizing agents.
Store in cool, dry conditions in well sealed containers.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

8.1 Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

8.2 Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: No data

8.3 Exposure controls

8.4 Personal protective equipment

General protective and hygienic measures
The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands:
Impervious gloves
Check protective gloves prior to each use for their proper condition.

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information
Appearance:
Form: Powder or granules
Color: White
Odor: Odorless
Odor threshold: Not determined.

pH-value (50 g/l) at 20 °C (68 °F): 6-8.5

Change in condition
Melting point/Melting range: >300 °C (>572 °F)
Boiling point/Boiling range: Not determined
Sublimation temperature / start: Not determined
Flammability (solid, gaseous) Not determined.
Ignition temperature: Not determined
Decomposition temperature: Not determined
Auto igniting: Not determined.

Danger of explosion: Not determined.
### Explosion limits:
- **Lower:** Not determined
- **Upper:** Not determined

### Vapor pressure:
- Not applicable.

### Density at 20 °C (68 °F):
- 2.13 g/cm³ (17.775 lbs/gal)

### Solubility in / Miscibility with Water at 20 °C (68 °F):
- 360 g/l

### Partition coefficient (n-octanol/water):
- Not determined.

### Density at 20 °C (68 °F):
- Not applicable.

### Viscosity:
- Dynamic: Not applicable.
- Kinematic: Not applicable.

### Stability and reactivity

**Reactivity**
- No information known.

**Chemical stability**
- Stable under recommended storage conditions.

**Thermal decomposition / conditions to be avoided**
- Decomposition will not occur if used and stored according to specifications.

**Possibility of hazardous reactions**
- Reacts with strong oxidizing agents

**Conditions to avoid**
- No further relevant information available.

**Incompatible materials:**
- Oxidizing agents

**Hazardous decomposition products:**
- Carbon monoxide and carbon dioxide

**Potassium oxide**

### Toxicological information

**Information on toxicological effects**

**Acute toxicity:**
- Harmful in contact with skin.
- Harmful if swallowed.

**Danger through skin absorption:**
- The following RTECS statement/statements refer to the anhydrous compound:
  - The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in this product.
  - **LD/LC50 values that are relevant for classification:**
    - **Oral LD50** 660 mg/kg (rat)

**Skin irritation or corrosion:**
- May cause irritation

**Eye irritation or corrosion:**
- May cause irritation

**Sensitization:**
- No sensitizing effects known.

**Germ cell mutagenicity:**
- No effects known.

**Carcinogenicity:**
- No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**Reproductive toxicity:**
- No effects known.

**Specific target organ system toxicity - repeated exposure:**
- No effects known.

**Specific target organ system toxicity - single exposure:**
- No effects known.

**Subacute to chronic toxicity:**
- No effects known.

**Additional toxicological information:**
- To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

### Ecological information

**Toxicity**
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.

**Additional ecological information:**

**General notes:**
- Do not allow material to be released to the environment without proper governmental permits.
- Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
- Avoid transfer into the environment.

**Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**Other adverse effects:**
- No further relevant information available.

### Transport information

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</table>
15 Regulatory information

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

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS)

Hazard pictograms

GHS07

Signal word Warning

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P312 Call a POISON CENTER/doctor/…/if you feel unwell.
P363 Wash contaminated clothing before reuse.
P322 Specific measures (see on this label).
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

California Proposition 65

Prop 65 - Chemicals known to cause cancer Substance is not listed.
Prop 65 - Developmental toxicity Substance is not listed.
Prop 65 - Developmental toxicity, female Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.

Information about limitation of use: For use only by technically qualified individuals.

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department

Date of preparation / last revision 11/23/2015 / -

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)
DOT: US Department of Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
vPvB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienist (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)