SAFETY DATA SHEET

1. Identification

Product identifier: POTASSIUM OXALATE

Other means of identification
Product No.: 3212

Recommended use and restriction on use
Recommended use: Not available.
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer
Company Name: Avantor Performance Materials, Inc.
Address: 3477 Corporate Parkway, Suite 200
Center Valley, PA 18034
Telephone: Customer Service: 855-282-6867
Fax: Contact Person: Environmental Health & Safety
e-mail: info@avantormaterials.com

Emergency telephone number:
24 Hour Emergency: 908-859-2151
Chemtrec: 800-424-9300

2. Hazard(s) identification

Hazard Classification
Not classified

Label Elements
Hazard Symbol: No symbol
Signal Word: No signal word.
Hazard Statement: Not applicable

Precautionary Statement

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Substances
Composition Comments: The components are not hazardous or are below required disclosure limits.

4. First-aid measures
General information: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

Ingestion: Rinse mouth. Call a physician or poison control center immediately. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Inhalation: Move to fresh air. Get medical attention immediately.

Skin Contact: Wash skin thoroughly with soap and water. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance.

Most important symptoms/effects, acute and delayed

Symptoms: May cause irritation to skin, eyes, and respiratory tract.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: In case of fire and/or explosion do not breathe fumes.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Ventilate closed spaces before entering them. Use personal protective equipment. See Section 8 of the MSDS for Personal Protective Equipment.

Methods and material for containment and cleaning up: Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.
Environmental Precautions: Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Do not taste or swallow. Do not eat, drink or smoke when using the product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities: Keep containers tightly closed. Store in cool, dry place. Store in a well-ventilated place. Keep material from heat, light, sparks and flame.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits
None of the components have assigned exposure limits.

Appropriate Engineering Controls
No data available.

Individual protection measures, such as personal protective equipment

General information: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin Protection
Hand Protection: Chemical resistant gloves
Other: Wear suitable protective clothing.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Air-purifying respirator with a high efficiency particulate filter.

Hygiene measures: Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Physical state: Solid
Form: Crystals or powder.
Color: Colorless
Odor: Odorless
Odor threshold: No data available.
PH: No data available.
Melting point/freezing point: 160 °C
Initial boiling point and boiling range: No data available.
Flash Point: Not applicable
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Upper/lower limit on flammability or explosive limits
  Flammability limit - upper (%): No data available.
  Flammability limit - lower (%): No data available.
  Explosive limit - upper (%): No data available.
  Explosive limit - lower (%): No data available.
Vapor pressure: No data available.
Vapor density: No data available.
Relative density: 2.13 (20 °C)
Solubility(ies)
  Solubility in water: 300 g/l
  Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.
Other information
  Molecular weight: 184.24 g/mol (C2H2O4.H2O.2K)

10. Stability and reactivity

Reactivity: No dangerous reaction known under conditions of normal use.
Chemical Stability: Material is stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization does not occur.
Conditions to Avoid: Heat, sparks, flames. Contact with incompatible materials.
Hazardous Decomposition Products: Oxides of Carbon.

11. Toxicological information

Information on likely routes of exposure
  Ingestion: May cause irritation of the gastrointestinal tract.
  Inhalation: May cause irritation to the respiratory system.
  Skin Contact: May cause irritation.
  Eye contact: May irritate eyes.

Information on toxicological effects
  Acute toxicity (list all possible routes of exposure)
    Oral Product: No data available.
No data available.

**Inhalation**
Product: No data available.

**Repeated Dose Toxicity**
Product: No data available.

**Skin Corrosion/Irritation**
Product: May cause skin irritation.

**Serious Eye Damage/Eye Irritation**
Product: May irritate eyes.

**Respiratory or Skin Sensitization**
Product: Not a skin sensitizer.

**Carcinogenicity**
Product: This substance has no evidence of carcinogenic properties.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**
No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**
No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**
No carcinogenic components identified

**Germ Cell Mutagenicity**
- **In vitro**
  Product: No mutagenic components identified

- **In vivo**
  Product: No mutagenic components identified

**Reproductive Toxicity**
Product: No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure**
Product: None known.

**Specific Target Organ Toxicity - Repeated Exposure**
Product: None known.

**Aspiration Hazard**
Product: Not classified

**Other Effects:** None known.

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**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

- **Fish**
  Product: LC 50 (Carp (Leuciscus idus melanotus), 48 h): 160 mg/l

- **Aquatic Invertebrates**
  Product: EC 50 (Water flea (Daphnia magna), 48 h): 162.2 mg/l
Chronic hazards to the aquatic environment:

- **Fish**
  - **Product:** No data available.

- **Aquatic Invertebrates**
  - **Product:** No data available.

- **Toxicity to Aquatic Plants**
  - **Product:** No data available.

Persistence and Degradability

- **Biodegradation**
  - **Product:** The product is readily biodegradable.

- **BOD/COD Ratio**
  - **Product:** No data available.

Bioaccumulative Potential

- **Bioconcentration Factor (BCF)**
  - **Product:** No data available on bioaccumulation.

- **Partition Coefficient n-octanol / water (log Kow)**
  - **Product:** No data available.

Mobility in Soil: The product is water soluble and may spread in water systems.

Other Adverse Effects: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

- **DOT**
  - Not regulated.

- **IMDG**
  - Not regulated.

- **IATA**
  - Not regulated.

15. Regulatory information

US Federal Regulations

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  None present or none present in regulated quantities.
CERCLA Hazardous Substance List (40 CFR 302.4): None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

[✓] Acute (Immediate)  [✓] Chronic (Delayed)  [ ] Fire  [ ] Reactive  [ ] Pressure Generating

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

SARA 304 Emergency Release Notification
None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical
None present or none present in regulated quantities.

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.
Inventory Status:
- US TSCA Inventory: On or in compliance with the inventory
- Australia AICS: On or in compliance with the inventory
- Canada DSL Inventory List: On or in compliance with the inventory
- EINECS, ELINCS or NLP: On or in compliance with the inventory
- Japan (ENCS) List: On or in compliance with the inventory
- China Inv. Existing Chemical Substances: On or in compliance with the inventory
- Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory
- Canada NDSL Inventory: Not in compliance with the inventory.
- Philippines PICCS: On or in compliance with the inventory
- New Zealand Inventory of Chemicals: On or in compliance with the inventory
- Japan ISHL Listing: On or in compliance with the inventory
- Japan Pharmacopoeia Listing: Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

NFPA Hazard ID

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<tr>
<th>Flammability</th>
<th>Health</th>
<th>Reactivity</th>
<th>Special hazard.</th>
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Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date: 11-06-2014
Revision Date: No data available.
Version #: 1.0
Further Information: No data available.
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