SAFETY DATA SHEET

1. Identification

Product identifier: Potassium iodide

Other means of identification
Product No.: 1112, 3164, 3162, 1127, 1123, 1115

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

Health hazards
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2B
Toxic to reproduction Category 2
Specific target organ toxicity - single exposure Category 3
Specific target organ toxicity - repeated exposure Category 1

Label elements

Hazard symbol:

Signal word: Danger

Hazard statement:
Causes skin irritation.
Causes eye irritation.
May cause respiratory irritation.
Suspected of damaging the unborn child.
Causes damage to organs through prolonged or repeated exposure.
Precautionary statement

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical identity</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTASSIUM IODIDE</td>
<td></td>
<td>7681-11-0</td>
<td>99 - 100%</td>
</tr>
</tbody>
</table>

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information: Ensure that emergency personnel are aware of the material involved, and take precautions to protect themselves.

Ingestion: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

Inhalation: Move to fresh air. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact: Wash the skin immediately with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation persists after washing. In case of irritation from airborne exposure, move to fresh air.

Most important symptoms/effects, acute and delayed

Symptoms: Irritating to eyes, respiratory system and skin.
Indication of immediate medical attention and special treatment needed

**Treatment:** Treat symptomatically. Symptoms may be delayed.

5. Fire-fighting measures

**General fire hazards:** No unusual fire or explosion hazards noted.

**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:** In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool.
- **Special protective equipment for fire-fighters:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** See Section 8 of the MSDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures:** Stop the flow of material, if this is without risk. Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions:** Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Do not taste or swallow. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Keep away from food, drink and animal feeding stuffs. Store in tightly closed original container in a dry, cool and well-ventilated place.
8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Chemical identity</th>
<th>Type</th>
<th>Exposure Limit values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTASSIUM IODIDE</td>
<td>TWA</td>
<td>0.01 ppm</td>
<td>US. ACGIH Threshold Limit Values (2011)</td>
</tr>
<tr>
<td>- Inhalable fraction and vapor.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POTASSIUM IODIDE</td>
<td>ST ESL</td>
<td>50 µg/m3</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)</td>
</tr>
<tr>
<td>- Particulate.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AN ESL</td>
<td></td>
<td>5 µg/m3</td>
<td>US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Adequate ventilation should be provided so that exposure limits are not exceeded.

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).

Skin protection

Hand protection: Wear protective gloves.

Other: Wear suitable protective clothing.

Respiratory protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Hygiene measures: Provide eyewash station and safety shower. Do not eat, drink or smoke when using the product. 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. Wash contaminated clothing before reuse.

9. Physical and chemical properties

Appearance

Physical state: Solid
Form: Granules or powder
Color: Colorless or white
Odor: No data available.
Odor threshold: No data available.
pH: 7 - 9 Aqueous solution is neutral or usually slightly alkaline.
Melting point/freezing point: 681 °C
Initial boiling point and boiling range: 1,323 °C
Flash Point: No data available.
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:** Estimated < 0.0000001 kPa (25 °C)
**Vapor density:** No data available.
**Relative density:** 3.13

**Solubility(ies):**
- **Solubility in water:** 1.43 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:** 166.02 g/mol (IK)

### 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:** Exposure to air. Moisture. Light.
**Incompatible materials:** Strong oxidizing agents. Chlorinated compounds. Inorganic salts. Acids.
**Hazardous decomposition products:** Halogens. Oxides of potassium.

### 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:** Causes skin irritation.
- **Eye contact:** Causes eye irritation.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**
- **Oral Product:** No data available.
- **Dermal Product:** No data available.
- **Inhalation Product:** No data available.
Repeated dose toxicity
Product: No data available.

Skin corrosion/irritation
Product: Causes skin irritation.

Serious eye damage/eye irritation
Product: Causes eye irritation.

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

No carcinogenic components identified

Germ cell mutagenicity
In vitro
Product: No mutagenic components identified

In vivo
Product: No mutagenic components identified

Reproductive toxicity
Product: May damage fertility or the unborn child.

Specific target organ toxicity - single exposure
Product: Respiratory tract irritation.

Specific target organ toxicity - repeated exposure
Product: Thyroid - Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard
Product: Not classified

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
POTASSIUM IODIDE
LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 896 mg/l Mortality

Aquatic invertebrates
Product: No data available.

Specified substance(s):
POTASSIUM IODIDE

LC 50 (Zebra mussel (Dreissena polymorpha), 24 h): 220 - 313 mg/l
Mortality

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: There are no data on the degradability of this product.

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: No data available.

Known or predicted distribution to environmental compartments

POTASSIUM IODIDE No data available.

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)
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
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

- X Acute (Immediate)
- X 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

<table>
<thead>
<tr>
<th>Chemical identity</th>
<th>Threshold Planning Quantity</th>
</tr>
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<tbody>
<tr>
<td>POTASSIUM IODIDE</td>
<td>500 lbs</td>
</tr>
</tbody>
</table>

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:
- Australia AICS: On or in compliance with the inventory
- Canada DSL Inventory List: On or in compliance with the inventory
- EU EINECS List: On or in compliance with the inventory
- EU ELINCS List: Not in compliance with the inventory.
- Japan (ENCS) List: Not in compliance with the inventory.
- EU No Longer Polymers List: Not 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
- US TSCA Inventory: 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

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 03-06-2014
Revision date: No data available.
Version #: 1.0
Further information: No data available.
Disclaimer:

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