

Revision Date: 02-20-2020

# SAFETY DATA SHEET

According to US Regulation 29 CFR 1910.1200 (HazCom 2012)

### 1. Identification

Product identifier: Potassium Iodate

Other means of identification

Synonyms: lodic acid, potassium salt

**Product No.:** 3156, 3798

Recommended restrictions

Recommended use: For Laboratory, Research or Manufacturing Use.

Restrictions on use: Not determined.

Details of the supplier of the safety data sheet

Company Name: Avantor Performance Materials, LLC

Address: 100 Matsonford Rd, Suite 200

Radnor, PA 19087

Telephone: Customer Service: 855-282-6867

Contact Person: Product Information Compliance E-mail: info@avantormaterials.com

Emergency telephone number:

CHEMTREC: 1-800-424-9300 within US and Canada (24 hrs/day, 7 days/week)

### 2. Hazard(s) identification

### **Hazard Classification**

#### **Physical Hazards**

Oxidizing solids Category 2

**Health Hazards** 

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 2A

#### Unknown toxicity - Health

Acute toxicity, dermal 100 % Acute toxicity, inhalation, dust 100 %

or mist

### **Label Elements**

#### Hazard Symbol:



Revision Date: 02-20-2020



Signal Word: Danger

Hazard Statement: Causes skin irritation.

Causes serious eye irritation. May intensify fire; oxidizer.

Precautionary Statements

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking. Keep away from clothing and other combustible materials. Take any precaution to avoid mixing with combustibles. Wear protective gloves/protective clothing/eye protection/face protection. Wash

hands thoroughly after handling.

**Response:** In case of fire: Use water spray, foam, dry powder or carbon dioxide for

extinction. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. 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.

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.

Hazard(s) not otherwise classified (HNOC): None.

### 3. Composition/information on ingredients

#### Substances

Chemical Identity	CAS number	Content in percent (%)*
Potassium iodate	7758-05-6	100%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

#### 4. First-aid measures

General information: Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance. Ensure that emergency personnel are aware of

the material involved, and take precautions to protect themselves.

Ingestion: Rinse mouth. Get medical attention if symptoms occur. Do not induce

vomiting without advice from poison control center. Never give liquid to an

unconscious person.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist. If breathing

stops, provide artificial respiration. For breathing difficulties, oxygen may be

necessary.



Revision Date: 02-20-2020

**Skin Contact:** Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes. IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before

removing clothes.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention if symptoms persist.

Most important symptoms/effects, acute and delayed

**Symptoms:** Irritating to eyes, respiratory system and skin.

Hazards: None known.

Indication of immediate medical attention and special treatment needed

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

5. Fire-fighting measures

General Fire Hazards: Oxidizing material. 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:

May intensify fire; oxidizer. Explosion risk.

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. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of

explosion.

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 SDS for Personal Protective Equipment.

Methods and material for containment and cleaning

Remove sources of ignition. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination. Use non-sparking tools.

**Notification Procedures:** 

Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.



Revision Date: 02-20-2020

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or

spillage if safe to do so. Avoid release to the environment.

### 7. Handling and storage

Precautions for safe handling: Do not taste or swallow. Wash hands thoroughly after handling. Avoid

contact with eyes. Keep away from food, drink and animal feeding stuffs. Keep away from combustible material. Do not eat, drink or smoke when using the product. Do not smoke, use open fire or other sources of ignition. Use personal protective equipment as required. See Section 8 of the SDS for Personal Protective Equipment. Observe good industrial hygiene practices. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection. Take any precaution to avoid mixing with combustibles. Wear fire resistant or flame retardant clothing. Avoid contact with skin.

Conditions for safe storage,

including any incompatibilities:

Keep container tightly closed in a cool, well-ventilated place. Keep container dry. Store away from incompatible materials. Eliminate sources of ignition.

### 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:** 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. 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. Avoid contact with eyes,

skin, and clothing.

### 9. Physical and chemical properties



Revision Date: 02-20-2020

#### Appearance

Physical state: Solid

Form: Crystals or powder.

Color: White Odor: Odorless

Odor threshold: No data available. pH: 6.07 (26 °C) Melting point/freezing point: 560 °C 734.9 °C Initial boiling point and boiling range:

Flash Point: No data available. No data available. **Evaporation rate:** No data available. Flammability (solid, gas):

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available. 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: Density: 3.89 g/cm3 (20 °C)

3.89 (20 °C) Relative density:

Solubility(ies)

Solubility in water: 474 g/l (0 °C)

320 g/l (100 °C)

Solubility (other): alcohol: Practically insoluble

Partition coefficient (n-octanol/water): No data available. Auto-ignition temperature: No data available. No data available. Decomposition temperature: No data available. Viscosity:

Other information

214.02 g/mol (KIO3) Molecular weight:

### 10. Stability and reactivity

No dangerous reaction known under conditions of normal use. Reactivity:

Material is stable under normal conditions. **Chemical Stability:** 

Possibility of hazardous

reactions:

Hazardous polymerization does not occur.

Conditions to avoid: Heat, sparks, flames. Shocks and physical damage. Contact with

incompatible materials.

Incompatible Materials: Reducing agents. Flammable/combustible material. Organic compounds.

Powdered metal. Aluminum. Hydrogen peroxide (H2O2) Sulfur oxides.

**Hazardous Decomposition** 

Products:

Toxic metal fumes may form when heated to decomposition.

### 11. Toxicological information

#### Information on likely routes of exposure



Revision Date: 02-20-2020

**Inhalation:** May be harmful if inhaled.

**Skin Contact:** Causes skin irritation.

**Eye contact:** Causes serious eye irritation.

**Ingestion:** May cause irritation of the gastrointestinal tract.

#### Information on toxicological effects

### Acute toxicity (list all possible routes of exposure)

Oral

**Product:** No data available.

Dermal

**Product:** Discriminating dose: (Human) 1,300 mg/kg

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 serious eye irritation.

Respiratory or Skin Sensitization

**Product:** Not a skin nor a respiratory 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



Revision Date: 02-20-2020

**Product:** No data available.

Specific Target Organ Toxicity - Repeated Exposure

**Product:** No data available.

**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 iodate LC 50 (Oncorhynchus mykiss, 96 h): 220 - 420 mg/l

**Aquatic Invertebrates** 

**Product:** No data available.

Specified substance(s):

Potassium iodate EC 50 (Daphnia magna, 48 h): > 100 mg/l

NOAEL (Daphnia magna, 48 h): > 100 mg/l LC 50 (Daphnia magna, 48 h): 129 mg/l

### Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Potassium iodate LC 50 (Lepomis microlophus, 10 d): 165 - 262 mg/l

**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)



Revision Date: 02-20-2020

**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: Contains a substance which causes risk of hazardous effects to the

environment.

### 13. Disposal considerations

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

laws. 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.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.

### 14. Transport information

DOT

UN Number: UN 1479

UN Proper Shipping Name: Oxidizing solid, n.o.s.(Potassium iodate)

Transport Hazard Class(es)

Class: 5.1
Label(s): 5.1
Packing Group: II
Marine Pollutant: No

Special precautions for user: Not determined.

**IMDG** 

UN Number: UN 1479

UN Proper Shipping Name: OXIDIZING SOLID, N.O.S. (POTASSIUM IODATE)

Transport Hazard Class(es)

 Class:
 5.1

 Label(s):
 5.1

 EmS No.:
 F-A, S-Q

Packing Group: II
Marine Pollutant: No

Special precautions for user: Not determined.

IATA

UN Number: UN 1479

Proper Shipping Name: Oxidizing solid, n.o.s.(Potassium iodate)

Transport Hazard Class(es):

Class: 5.1
Label(s): 5.1
Packing Group: II
Marine Pollutant: No

Special precautions for user: Not determined.

### 15. Regulatory information

#### **US Federal Regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)



Revision Date: 02-20-2020

None present or none present in regulated quantities.

#### 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

Oxidizer (liquid, solid or gas)
Skin Corrosion or Irritation
Serious eye damage or eye irritation

### 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

Chemical Identity Threshold Planning Quantity

Potassium iodate 10000 lbs.

### SARA 313 (TRI Reporting)

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.

#### Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):

None present or none present in regulated quantities.

### **US State Regulations**

#### US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

### 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.

# International regulations

#### Montreal protocol

Not applicable

# Stockholm convention

Not applicable

#### Rotterdam convention



Revision Date: 02-20-2020

#### Not applicable

### Kyoto protocol

Not applicable

### **Inventory Status:**

Australia AICS:

On or in compliance with the inventory
Canada DSL Inventory List:

On or in compliance with the inventory
China Inv. Existing Chemical Substances:

On or in compliance with the inventory

China Inv. Existing Chemical Substances:

Japan (ENCS) List:

On or in compliance with the inventory
On or in compliance with the inventory
On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):

On or in compliance with the inventory
On or in compliance with the inventory

Korea Existing Chemicals Inv. (KECI):

Mexico INSQ:

Not in compliance with the inventory.

New Zealand Inventory of Chemicals:

On or in compliance with the inventory.

On or in compliance with the inventory.

Philippines PICCS:

On or in compliance with the inventory

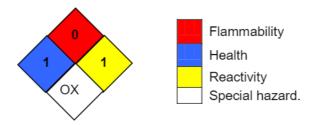
US TSCA Inventory:

On or in compliance with the inventory
EINECS, ELINCS or NLP:

On or 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; RNP - Rating not possible OX: Oxidizing agent

Issue Date: 02-20-2020

Revision Information: Not relevant.

Version #: 1.2

**Source of information:** Sources of information used in preparing this SDS included one or more of

the following: results from in house or supplier toxicology studies, information from the Toxicology Data Network (TOXNET), European Chemical Agency (ECHA) substance dossiers, IARC Monographs, US National Toxicology Program data, the Agency for Toxic Substances and Disease Registry, other

manufacturer's SDSs and other sources, as appropriate.

Further Information: No data available.



Revision Date: 02-20-2020

#### Disclaimer:

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