

Revision date: 03-06-2014

## 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 Category 3

exposure

Specific target organ toxicity - Category 1

repeated exposure

#### 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.



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## **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

## **Substances**

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*			
POTASSIUM IODIDE		7681-11-0	99 - 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:** 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.



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## Indication of immediate medical attention and special treatment needed

**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.



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## 8. Exposure controls/personal protection

## **Control parameters**

Occupational exposure limits

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

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

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:

Evaporation rate:

No data available.

No data available.

Flammability (solid, gas):

No data available.



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## Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

No data available.

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):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available.

No data available.

No data available.

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.



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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

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:** 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/I Mortality

**Aquatic invertebrates** 

**Product:** No data available.

Specified substance(s):



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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.



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## 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**

Х	Acute (Immediate)	Х	Chronic (Delayed)	Fire	Reactive	Pressure Generating
^	Acute (IIIIIIediate)	^	Cilionic (Delayeu)	1 116	Neactive	Fressure Generaling

#### 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 identityThreshold Planning QuantityPOTASSIUM IODIDE500 lbs

## 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.



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#### **Inventory Status:**

Australia AICS:

Canada DSL Inventory List:

**EU EINECS List: EU ELINCS List:** Japan (ENCS) List:

EU No Longer Polymers List:

China Inv. Existing Chemical Substances: Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory: Philippines PICCS: US TSCA Inventory:

New Zealand Inventory of Chemicals:

Japan ISHL Listing:

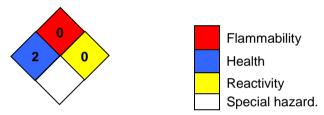
Japan Pharmacopoeia Listing:

On or in compliance with the inventory On or in compliance with the inventory On or in compliance with the inventory Not in compliance with the inventory. Not in compliance with the inventory. Not in compliance with the inventory. On or in compliance with the inventory On or in compliance with the inventory Not in compliance with the inventory. On or in compliance with the inventory On or in compliance with the inventory On or in compliance with the inventory On or in compliance with the inventory

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:

Version: 1.0

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