

**SAFETY DATA SHEET**

Creation Date 22-Sep-2009

Revision Date 19-Jan-2018

Revision Number 3

**1. Identification**

**Product Name** Potassium iodate

**Cat No. :** AC196740000; AC196740025; AC196741000; AC196745000

**CAS-No** 7758-05-6  
**Synonyms** Iodic acid, potassium salt.

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.  
**Details of the supplier of the safety data sheet**

**Company**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number**For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887**2. Hazard(s) identification****Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                                  |            |
|--------------------------------------------------|------------|
| Oxidizing solids                                 | Category 2 |
| Acute oral toxicity                              | Category 4 |
| Skin Corrosion/Irritation                        | Category 2 |
| Serious Eye Damage/Eye Irritation                | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Target Organs - Respiratory system.              |            |

**Label Elements****Signal Word**

Danger

**Hazard Statements**

May intensify fire; oxidizer  
Harmful if swallowed  
Causes skin irritation

Causes serious eye irritation  
May cause respiratory irritation

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep/Store away from clothing/ other combustible materials  
Take any precaution to avoid mixing with combustibles

**Inhalation**

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

**Skin**

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

**Eyes**

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

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Fire**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Storage**

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

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

### 3. Composition/Information on Ingredients

| Component                                      | CAS-No    | Weight % |
|------------------------------------------------|-----------|----------|
| Iodic acid (HIO <sub>3</sub> ), potassium salt | 7758-05-6 | 98       |

### 4. First-aid measures

**Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Immediate medical attention is required.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

|                                            |                                                                                                                          |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                          | Remove to fresh air. Get medical attention immediately if symptoms occur. If not breathing, give artificial respiration. |
| <b>Ingestion</b>                           | Do NOT induce vomiting. Call a physician or poison control center immediately.                                           |
| <b>Most important symptoms and effects</b> | Irritating to eyes. Irritating to skin. May cause central nervous system depression: May cause adverse kidney effects    |
| <b>Notes to Physician</b>                  | Treat symptomatically                                                                                                    |

## 5. Fire-fighting measures

|                                         |                               |
|-----------------------------------------|-------------------------------|
| <b>Suitable Extinguishing Media</b>     | Flooding quantities of water. |
| <b>Unsuitable Extinguishing Media</b>   | No information available      |
| <b>Flash Point</b>                      | No information available      |
| <b>Method -</b>                         | No information available      |
| <b>Autoignition Temperature</b>         | No information available      |
| <b>Explosion Limits</b>                 |                               |
| <b>Upper</b>                            | No data available             |
| <b>Lower</b>                            | No data available             |
| <b>Oxidizing Properties</b>             | Oxidizer                      |
| <b>Sensitivity to Mechanical Impact</b> | No information available      |
| <b>Sensitivity to Static Discharge</b>  | No information available      |

### Specific Hazards Arising from the Chemical

Oxidizer: Contact with combustible/organic material may cause fire. Containers may explode when heated. Risk of explosion by shock, friction, fire or other sources of ignition. Runoff to sewer may create fire or explosion hazard. May ignite combustibles (wood, paper, oil, clothing, etc.).

### Hazardous Combustion Products

Hydrogen iodide. Potassium oxides.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### NFPA

**Health**  
2

**Flammability**  
0

**Instability**  
0

**Physical hazards**  
OX

## 6. Accidental release measures

|                                                                      |                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>                                          | Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Do not get in eyes, on skin, or on clothing. Do not subject to grinding/shock/friction. |
| Keep combustibles (wood, paper, oil, etc) away from spilled material |                                                                                                                                                                                                                                           |
| <b>Environmental Precautions</b>                                     | See Section 12 for additional Ecological Information.                                                                                                                                                                                     |
| <b>Methods for Containment and Clean Up</b>                          | Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.      |

## 7. Handling and storage

|                 |                                                                                                                                                                                                                                                                                 |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid dust formation. Do not subject to grinding/shock/friction. Keep away from clothing and other combustible materials. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Do |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

not ingest. If swallowed then seek immediate medical assistance.

**Storage**

Keep in a dry, cool and well-ventilated place. Refer product specification and/or product label for specific storage temperature requirement. Keep container tightly closed. Do not store near combustible materials. Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment****Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

|                                        |                          |
|----------------------------------------|--------------------------|
| Physical State                         | Powder Solid             |
| Appearance                             | Off-white                |
| Odor                                   | Odorless                 |
| Odor Threshold                         | No information available |
| pH                                     | Not applicable           |
| Melting Point/Range                    | 560 °C / 1040 °F         |
| Boiling Point/Range                    | No information available |
| Flash Point                            | No information available |
| Evaporation Rate                       | Not applicable           |
| Flammability (solid,gas)               | No information available |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | No information available |
| Vapor Density                          | Not applicable           |
| Specific Gravity                       | 3.930                    |
| Solubility                             | Soluble                  |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               | No information available |
| Decomposition Temperature              | No information available |
| Viscosity                              | Not applicable           |
| Molecular Formula                      | I K O <sub>3</sub>       |
| Molecular Weight                       | 214                      |

## 10. Stability and reactivity

**Reactive Hazard**

Yes

|                                         |                                                                                                                                       |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Stability</b>                        | Oxidizer: Contact with combustible/organic material may cause fire.                                                                   |
| <b>Conditions to Avoid</b>              | Excess heat. Incompatible products. Combustible material.                                                                             |
| <b>Incompatible Materials</b>           | Organic materials, Strong oxidizing agents, Sulfides, Peroxides, Metals, Reducing Agent, Strong reducing agents, Combustible material |
| <b>Hazardous Decomposition Products</b> | Hydrogen iodide, Potassium oxides                                                                                                     |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.                                                                                              |
| <b>Hazardous Reactions</b>              | None under normal processing.                                                                                                         |

## 11. Toxicological information

### Acute Toxicity

#### Product Information

#### Component Information

**Toxicologically Synergistic Products** No information available

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                        |                                                                                          |
|------------------------|------------------------------------------------------------------------------------------|
| <b>Irritation</b>      | Irritating to eyes Irritating to skin                                                    |
| <b>Sensitization</b>   | No information available                                                                 |
| <b>Carcinogenicity</b> | The table below indicates whether each agency has listed any ingredient as a carcinogen. |

| Component                                      | CAS-No    | IARC       | NTP        | ACGIH      | OSHA       | Mexico     |
|------------------------------------------------|-----------|------------|------------|------------|------------|------------|
| Iodic acid (HIO <sub>3</sub> ), potassium salt | 7758-05-6 | Not listed | Not listed | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** Respiratory system  
**STOT - repeated exposure** None known

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** May cause central nervous system depression: May cause adverse kidney effects

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains.

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

#### DOT

UN-No UN1479  
 Proper Shipping Name Oxidizing solid, n.o.s.  
 Technical Name Iodic acid (HIO<sub>3</sub>), potassium salt  
 Hazard Class 5.1  
 Packing Group II

#### TDG

UN-No UN1479  
 Proper Shipping Name Oxidizing solid, n.o.s.  
 Hazard Class 5.1  
 Packing Group II

#### IATA

UN-No UN1479  
 Proper Shipping Name Oxidizing solid, n.o.s.  
 Hazard Class 5.1  
 Packing Group II

#### IMDG/IMO

UN-No UN1479  
 Proper Shipping Name Oxidizing solid, n.o.s.  
 Hazard Class 5.1  
 Packing Group II

### 15. Regulatory information

#### United States of America Inventory

| Component                                      | CAS-No    | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|------------------------------------------------|-----------|------|-----------------------------------------------|-----------------------------|
| Iodic acid (HIO <sub>3</sub> ), potassium salt | 7758-05-6 | X    | ACTIVE                                        | -                           |

#### Legend:

**TSCA** - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

#### International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component                                      | CAS-No    | DSL | NDL | EINECS    | PICCS | ENCS | AICS | IECSC | KECL     |
|------------------------------------------------|-----------|-----|-----|-----------|-------|------|------|-------|----------|
| Iodic acid (HIO <sub>3</sub> ), potassium salt | 7758-05-6 | X   | -   | 231-831-9 | X     | X    | X    | X     | KE-29148 |

#### U.S. Federal Regulations

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

|                                                             |                                                             |
|-------------------------------------------------------------|-------------------------------------------------------------|
| <b>Clean Air Act</b>                                        | Not applicable                                              |
| <b>OSHA - Occupational Safety and Health Administration</b> | Not applicable                                              |
| <b>CERCLA</b>                                               | Not applicable                                              |
| <b>California Proposition 65</b>                            | This product does not contain any Proposition 65 chemicals. |
| <b>U.S. State Right-to-Know Regulations</b>                 | Not applicable                                              |
| <b>U.S. Department of Transportation</b>                    |                                                             |
| Reportable Quantity (RQ):                                   | N                                                           |
| DOT Marine Pollutant                                        | N                                                           |
| DOT Severe Marine Pollutant                                 | N                                                           |
| <b>U.S. Department of Homeland Security</b>                 | This product does not contain any DHS chemicals.            |
| <b><u>Other International Regulations</u></b>               |                                                             |
| <b>Mexico - Grade</b>                                       | No information available                                    |

## 16. Other information

|                         |                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Prepared By</b>      | Regulatory Affairs<br>Thermo Fisher Scientific<br>Email: EMSDS.RA@thermofisher.com                                                                                                                                                      |
| <b>Creation Date</b>    | 22-Sep-2009                                                                                                                                                                                                                             |
| <b>Revision Date</b>    | 19-Jan-2018                                                                                                                                                                                                                             |
| <b>Print Date</b>       | 19-Jan-2018                                                                                                                                                                                                                             |
| <b>Revision Summary</b> | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). |

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**