

## Potassium Iodide Granular, ACS

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### 1. PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** Potassium Iodide, Granular, ACS

**Synonyms/Generic Names:** Potide; Potassium salt, Iodic acid

**Product Number:** 4387

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information:** 920-623-2140 (Monday-Friday 8:00-4:30)  
[www.columbuschemical.com](http://www.columbuschemical.com)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

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### 2. HAZARDS IDENTIFICATION

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**Signal Words:** Warning

**Pictograms:**



**GHS Classification**

|                      |             |
|----------------------|-------------|
| Acute toxicity, Oral | Category 4  |
| Skin irritation      | Category 2  |
| Eye irritation       | Category 2A |

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

|      |                                |
|------|--------------------------------|
| H302 | Harmful if swallowed.          |
| H315 | Causes skin irritation.        |
| H319 | Causes serious eye irritation. |

**Precautionary Statements:**

|           |  |
|-----------|--|
| P264      | Wash hands thoroughly after handling.                            |
| P270      | Do not eat, drink or smoke when using this product.              |
| P280      | Wear protective gloves/ eye protection/face protection.          |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. |
| P302+P352 | IF ON SKIN: Wash with plenty of water.                           |

|                |  |
|----------------|--|
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P330           | Rinse mouth.   |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.   |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |
| P362+P364      | Take off contaminated clothing and wash it before reuse.   |
| P501           | Dispose of contents/container in accordance with local regulations.  |

**Potential Health Effects**

|                   |   |
|-------------------|---|
| <b>Eyes</b>       | Causes eye irritation.  |
| <b>Inhalation</b> | May be harmful if inhaled. Causes respiratory tract irritation. |
| <b>Skin</b>       | Harmful if absorbed through skin. Causes skin irritation.       |
| <b>Ingestion</b>  | Harmful if swallowed.   |

**NFPA Ratings**

|                        |               |
|------------------------|---------------|
| <b>Health</b>          | 1             |
| <b>Flammability</b>    | 0             |
| <b>Reactivity</b>      | 0             |
| <b>Specific hazard</b> | Not Available |

**HMIS Ratings**

|                   |   |
|-------------------|---|
| <b>Health</b>     | 1 |
| <b>Fire</b>       | 0 |
| <b>Reactivity</b> | 0 |

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

| Component        | Weight % | CAS #     | EINECS# / ELINCS# | Formula | Molecular Weight |
|------------------|----------|-----------|-------------------|---------|------------------|
| Potassium Iodide | >99      | 7681-11-0 | 231-659-4         | KI      | 166.01 g/mol     |

**4. FIRST-AID INFORMATION**

|                   |   |
|-------------------|---|
| <b>Eyes</b>       | Rinse with plenty of water for at least 15 minutes and seek medical attention if necessary.   |
| <b>Inhalation</b> | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary. |
| <b>Skin</b>       | Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.                        |
| <b>Ingestion</b>  | <b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.      |

**5. FIREFIGHTING MEASURES**

|  |  |
|--|--|
| <b>Suitable (and unsuitable) extinguishing media</b>                 | Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water.                        |
| <b>Special protective equipment and precautions for firefighters</b> | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.            |
| <b>Specific hazards arising from the chemical</b>                    | May produce toxic fumes (potassium oxides, hydrogen iodide) under fire conditions. (See also Stability and Reactivity section) |

**6. ACCIDENTAL RELEASE MEASURES**

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | See section 8 for recommendations on the use of personal protective equipment. Avoid dust formation. |
|--|--|

|  |  |
|--|--|
| <b>Environmental precautions</b>                             | Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.  |
| <b>Methods and materials for containment and cleaning up</b> | Pick up and arrange disposal without creating dust. Sweep up and shovel. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. |

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## 7. HANDLING AND STORAGE

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### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities). Air, light, and moisture sensitive. Store under inert gas.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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### Occupational exposure controls:

| Component        | Exposure Limits        | Basis | Entity |
|------------------|------------------------|-------|--------|
| Potassium Iodide | 0.01 mg/m <sup>3</sup> | TLV   | ACGIH  |

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

### Personal Protection

|                   |  |
|-------------------|--|
| <b>Eyes</b>       | Wear chemical safety glasses with side shields or goggles.   |
| <b>Inhalation</b> | Provide local exhaust, preferably mechanical. If necessary use an approved respirator.   |
| <b>Skin</b>       | Wear appropriate chemical-resistant gloves, lab coat or apron and other protective clothing appropriate to the risk of exposure. |
| <b>Other</b>      | Not Available  |

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|  |                               |
|--|-------------------------------|
| Appearance (physical state, color, etc.) | White, crystalline solid.     |
| Odor                                     | Odorless                      |
| Odor threshold                           | Not Available                 |
| pH                                       | 6-9 at 166 g/l at 25°C (77°F) |
| Melting point/freezing point             | 681°C (1258°F)                |
| Initial boiling point and boiling range  | 1330°C (2426°F)               |
| Flash point                              | Not Flammable                 |
| Evaporation rate                         | Not Available                 |
| Flammability (solid, gas)                | Not Flammable                 |

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|   |  |
|---|--|
| Upper/lower flammability or explosive limit | Not Explosive  |
| Vapor pressure                              | Not Available  |
| Vapor density                               | Not Available  |
| Relative density                            | 3.130 g/cm <sup>3</sup>                                |
| Solubility (ies)                            | 125 g/100 mL @ 0°C (32°F); 208 g/100 mL @ 100° (212°F) |
| Partition coefficient: n-octanol/water      | Not Available  |
| Auto-ignition temperature                   | Not Available  |
| Decomposition temperature                   | Not Available  |

## 10. STABILITY AND REACTIVITY

|   |   |
|---|---|
| <b>Chemical Stability</b>                 | Stable  |
| <b>Possibility of Hazardous Reactions</b> | Will not occur.   |
| <b>Conditions to Avoid</b>                | Moisture, heat.   |
| <b>Incompatible Materials</b>             | Strong reducing agents, nickel, strong acids, steel, aluminum, alkali metals, brass, magnesium, zinc, cadmium, copper, tin. |
| <b>Hazardous Decomposition Products</b>   | Hydrogen iodide, potassium oxide  |

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Potassium Iodide

|                    |   |
|--------------------|---|
| <b>Skin</b>        | Skin – rabbit – Irritating to skin.                         |
| <b>Eyes</b>        | Eyes – rabbit – Irritating to eyes – 24 hours – Draize test |
| <b>Respiratory</b> | Not Available   |
| <b>Ingestion</b>   | LD50 Oral – mouse – 1,000 mg/kg                             |

### Carcinogenicity

|              |  |
|--------------|--|
| <b>IARC</b>  | No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. |
| <b>ACGIH</b> | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.            |
| <b>NTP</b>   | No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.                 |
| <b>OSHA</b>  | No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.             |

### Signs & Symptoms of Exposure

|                    |   |
|--------------------|---|
| <b>Skin</b>        | Redness, swelling, pain, itchiness, rash                                |
| <b>Eyes</b>        | Redness, pain, tearing, conjunctivitis                                  |
| <b>Respiratory</b> | Coughing, wheezing, laryngitis, shortness of breath                     |
| <b>Ingestion</b>   | Gastrointestinal pain, burning sensation, headache, nausea and vomiting |

|                                       |  |
|---------------------------------------|--|
| <b>Chronic Toxicity</b>               | Not Available  |
| <b>Teratogenicity</b>                 | Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine containing drugs have been associated with fetal goiter. |
| <b>Mutagenicity</b>                   | Not Available  |
| <b>Embryotoxicity</b>                 | Not Available  |
| <b>Specific Target Organ Toxicity</b> | Thyroid.   |
| <b>Reproductive Toxicity</b>          | Not Available  |

|                                       |   |
|---------------------------------------|---|
| <b>Respiratory/Skin Sensitization</b> | Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. |
|---------------------------------------|---|

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### *Potassium Iodide*

|                             |  |
|-----------------------------|--|
| <b>Aquatic Vertebrate</b>   | LC50 – Oncorhynchus mykiss (Rainbow trout)- 2,190 mg/l- 96 h |
| <b>Aquatic Invertebrate</b> | EC50 – Daphnia magna (Water flea) – 2.7 mg/l – 24 hours      |
| <b>Terrestrial</b>          | Not Available  |

|                                      |               |
|--------------------------------------|---------------|
| <b>Persistence and Degradability</b> | Not Available |
| <b>Bioaccumulative Potential</b>     | Not Available |
| <b>Mobility in Soil</b>              | Not Available |
| <b>PBT and vPvB Assessment</b>       | Not Available |
| <b>Other Adverse Effects</b>         | Not Available |

## 13. DISPOSAL CONSIDERATIONS

|                           |   |
|---------------------------|---|
| <b>Waste Residues</b>     | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container or residue. |
| <b>Product Containers</b> | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.            |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## 14. TRANSPORTATION INFORMATION

|                  |                     |
|------------------|---------------------|
| US DOT           | Not Dangerous Goods |
| TDG              | Not Dangerous Goods |
| IMDG             | Not Dangerous Goods |
| Marine Pollutant | No                  |
| IATA/ICAO        | Not Dangerous Goods |

## 15. REGULATORY INFORMATION

|   |  |
|---|--|
| TSCA Inventory Status   | All ingredients are listed on the TSCA Active inventory. |
| DSL / NDSL  | All ingredients are listed on the DSL inventory.         |
| California Proposition 65                                       | Not Listed   |
| Rhode Island: Hazardous Substance List                          | Not Listed   |
| Massachusetts: Toxic or Hazardous Substance List, Right to Know | Not Listed   |
| Pennsylvania: Hazardous Substance List                          | Not Listed   |
| New Jersey: Right to Know Hazardous Substance List              | Not Listed   |

|              |                      |
|--------------|----------------------|
| SARA 302     | Not Listed           |
| SARA 304     | Not Listed           |
| SARA 311     | Acute Health Hazard. |
| SARA 312     | Acute Health Hazard. |
| SARA 313     | Not Listed           |
| WHMIS Canada | Not Listed           |

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## 16. OTHER INFORMATION

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| Revision   | Date       |
|------------|------------|
| Original   | 07/08/2011 |
| Revision 1 | 07/03/2012 |
| Revision 2 | 11/18/2013 |
| Revision 3 | 01/27/2015 |
| Revision 4 | 09/08/2021 |

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