

**SAFETY DATA SHEET**  
**POTASSIUM IODIDE 5% w/v**

According to Regulation (EC) No 1907/2006, Annex II

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name	POTASSIUM IODIDE 5% w/v
Product number	1344
REACH registration notes	All the ingredients are listed or exempt.

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Identified uses	Laboratory reagent.
Uses advised against	No specific uses advised against are identified. Use only for intended applications.

**1.3. Details of the supplier of the safety data sheet****Supplier**

Reagent Chemical Services  
18 Aston Fields Road  
Whitehouse Industrial Estate  
Runcorn  
Cheshire WA7 3DL

T: 01928 716903 (08.30 - 17.00)  
F: 01928 716425  
E: [info@reagent.co.uk](mailto:info@reagent.co.uk)

**1.4. Emergency telephone number**

Emergency telephone	OHES Environmental Ltd 24-7 Tel. 0333 333 9939 (24 hour)
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**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

Physical hazards	Not Classified
Health hazards	STOT RE 2 - H373
Environmental hazards	Not Classified

**2.2. Label elements****Pictogram**

Signal word	Warning
Hazard statements	H373 May cause damage to organs through prolonged or repeated exposure.

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**Precautionary statements**

P260 Do not breathe vapour/ spray.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P314 Get medical advice/ attention if you feel unwell.  
 P501 Dispose of contents/ container in accordance with national regulations.

**Contains** POTASSIUM IODIDE

### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

<b>POTASSIUM IODIDE</b>	<b>5-10%</b>
CAS number: 7681-11-0	EC number: 231-659-4
	REACH registration number: 01-2119966161-40-0000
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>
Acute Tox. 4 - H302	-
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
STOT RE 1 - H372	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**General information** Remove affected person from source of contamination. Show this Safety Data Sheet to the medical personnel.

**Inhalation** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

**Ingestion** Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.

**Skin contact** Remove contaminated clothing and rinse skin thoroughly with water. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.

**Eye contact** If liquid has entered the eyes, proceed as follows. Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes and get medical attention.

**Protection of first aiders** First aid personnel should wear appropriate protective equipment during any rescue.

### 4.2. Most important symptoms and effects, both acute and delayed

**General information** The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

**Inhalation** Vapour from this product may be hazardous by inhalation.

**Ingestion** Severe stomach pain. Nausea, vomiting.

**Skin contact** May cause irritation.

**Eye contact** Causes eye irritation.

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### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor** Treat symptomatically.

**Specific treatments** No specific chemical antidote is known to be required after exposure to this product.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

**Suitable extinguishing media** The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire.

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards** The product is not flammable. Containers can burst violently or explode when heated, due to excessive pressure build-up.

**Hazardous combustion products** Thermal decomposition or combustion products may include the following substances: Oxides of the following substances: Potassium.

#### 5.3. Advice for firefighters

**Protective actions during firefighting** Fight fire with normal precautions from a reasonable distance. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Do not touch or walk into spilled material. Avoid inhalation of vapours and contact with skin and eyes. Wash thoroughly after dealing with a spillage.

**For emergency responders** Wear protective clothing, gloves, eye and face protection.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. To prevent release, place container with damaged side up.

#### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Wear protective clothing as described in Section 8 of this safety data sheet. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Wash thoroughly after dealing with a spillage.

#### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

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<b>Usage precautions</b>	Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours/spray and contact with skin and eyes. Use only in well-ventilated areas.
<b>Advice on general occupational hygiene</b>	Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

### 7.2. Conditions for safe storage, including any incompatibilities

<b>Storage precautions</b>	Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect containers from damage. Keep away from food, drink and animal feeding stuffs. Store away from the following materials: Acids. Alkalis. Oxidising materials.
<b>Storage class</b>	Chemical storage.

### 7.3. Specific end use(s)

<b>Specific end use(s)</b>	The identified uses for this product are detailed in Section 1.2.
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## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### POTASSIUM IODIDE (CAS: 7681-11-0)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 0.07 mg/m <sup>3</sup> Workers - Dermal; Long term systemic effects: 1 mg/kg/day General population - Inhalation; Long term systemic effects: 0.035 mg/m <sup>3</sup> General population - Dermal; Long term systemic effects: 1 mg/kg General population - Oral; Long term systemic effects: 0.01 mg/kg/day General population - Oral; Long term systemic effects: 0.01 mg/kg
<b>PNEC</b>	- Fresh water; 0.007 mg/l - Intermittent release; 0.075 mg/l - Sediment (Freshwater); 0.007 mg/kg - ;

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

#### Eye/face protection

Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

#### Hand protection

Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374. The breakthrough time for any glove material may be different for different glove manufacturers. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber. Thickness: ~ 0.11 mm

#### Other skin and body protection

Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

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<b>Hygiene measures</b>	Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes wet or contaminated. Wash promptly if skin becomes contaminated. Clean equipment and the work area every day. Warn cleaning personnel of any hazardous properties of the product.
<b>Respiratory protection</b>	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Wear a respirator fitted with the following cartridge: Organic vapour + dust and mist filter. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140. Check that the respirator fits tightly and the filter is changed regularly.
<b>Environmental exposure controls</b>	Store in a demarcated bunded area to prevent release to drains and/or watercourses. Keep container tightly sealed when not in use.

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Colourless to pale yellow.
<b>Odour</b>	Odourless.
<b>pH</b>	Not determined.
<b>Melting point</b>	No specific test data are available.
<b>Initial boiling point and range</b>	No specific test data are available.
<b>Flash point</b>	> 100°C CC (Closed cup).
<b>Evaporation rate</b>	Not determined.
<b>Flammability (solid, gas)</b>	Scientifically unjustified. Technical impossibility to obtain the data.
<b>Upper/lower flammability or explosive limits</b>	Scientifically unjustified.
<b>Vapour pressure</b>	Not determined.
<b>Relative density</b>	Not known.
<b>Solubility(ies)</b>	Miscible with water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	No specific test data are available.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Does not meet the criteria for classification as oxidising.

#### 9.2. Other information

<b>Other information</b>	None.
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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#### 10.2. Chemical stability

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**Stability** Stable at normal ambient temperatures and when used as recommended.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Reactions with the following materials may generate heat: Strong acids. Strong alkalis. Strong oxidising agents.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid excessive heat for prolonged periods of time. Avoid freezing.

### 10.5. Incompatible materials

**Materials to avoid** Avoid contact with the following materials: Strong acids. Strong alkalis. Oxidising materials.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Heating may generate the following products: Oxides of the following substances: Potassium.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** No specific test data are available.

**ATE oral (mg/kg)** 10,000.0

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** No specific test data are available.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** No specific test data are available.

#### Skin corrosion/irritation

**Skin corrosion/irritation** Not determined.

#### Serious eye damage/irritation

**Serious eye damage/irritation** No specific test data are available.

#### Respiratory sensitisation

**Respiratory sensitisation** No specific test data are available.

#### Skin sensitisation

**Skin sensitisation** No specific test data are available.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Does not contain any substances known to be mutagenic.

**Genotoxicity - in vivo** Does not contain any substances known to be mutagenic.

#### Carcinogenicity

**Carcinogenicity** Does not contain any substances known to be carcinogenic.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Does not contain any substances known to be toxic to reproduction.

**Reproductive toxicity - development** No specific test data are available.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** No specific test data are available.

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### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** No specific test data are available.

### Aspiration hazard

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

**Inhalation** Vapour from this product may be hazardous by inhalation.

**Ingestion** May cause discomfort if swallowed. May cause stomach pain or vomiting.

**Skin contact** May cause irritation.

**Eye contact** May cause severe eye irritation.

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**Other health effects** Risk of sensitisation and allergic reactions among sensitive individuals.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Acute Tox. 4 - H302 Harmful if swallowed. LD<sub>50</sub> 3118 mg/kg, Oral, Rat

**ATE oral (mg/kg)** 500.0

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Acute Tox. 4 - H312 Harmful in contact with skin.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

**Animal data** Irritating.

#### Serious eye damage/irritation

**Serious eye damage/irritation** Causes serious eye irritation.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met.

**IARC carcinogenicity** None of the ingredients are listed or exempt.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Based on available data the classification criteria are not met. Developmental toxicity: - NOAEL: 1 ppm, Oral, Rat

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### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified as a specific target organ toxicant after a single exposure.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified as a specific target organ toxicant after repeated exposure. NOAEL 0.01 mg/kg/day, Oral, Human

### Aspiration hazard

**Aspiration hazard** Not relevant. Solid.

### **General information**

Dust may irritate the eyes and the respiratory system. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

### **Inhalation**

Dust may irritate the respiratory system.

### **Ingestion**

May cause discomfort if swallowed. Stomach pain. Nausea, vomiting.

### **Skin contact**

Redness. Irritating to skin.

### **Eye contact**

Irritating to eyes.

### **Route of entry**

Ingestion Inhalation Skin and/or eye contact

### **Target organs**

No specific target organs known.

## SECTION 12: Ecological Information

### **Ecotoxicity**

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

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### **Ecotoxicity**

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

### 12.1. Toxicity

#### **Acute toxicity - fish**

No specific test data are available.

#### **Acute toxicity - aquatic invertebrates**

Not determined.

#### **Acute toxicity - aquatic plants**

Not determined.

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### **Toxicity**

Based on available data the classification criteria are not met.

#### **Acute toxicity - fish**

LC<sub>50</sub>, 96 hours: 3780 mg/l, Onchorhynchus mykiss (Rainbow trout)

#### **Acute toxicity - aquatic invertebrates**

EC<sub>50</sub>, 48 hours: 7.5 mg/l, Daphnia magna

#### **Acute toxicity - aquatic plants**

Toxicity threshold, 7 day: 2370 mg/l, Scenedesmus Quadricauda

### 12.2. Persistence and degradability

#### **Persistence and degradability**

There are no data on the degradability of this product.



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<b>Persistence and degradability</b>	The degradability of the product is not known.
<b>Stability (hydrolysis)</b>	Scientifically unjustified.
<b>Biodegradation</b>	Scientifically unjustified.

#### 12.3. Bioaccumulative potential

<b>Bioaccumulative potential</b>	The product does not contain any substances expected to be bioaccumulating.
<b>Partition coefficient</b>	Not determined.

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<b>Bioaccumulative potential</b>	No data available on bioaccumulation.
<b>Partition coefficient</b>	Scientifically unjustified.

#### 12.4. Mobility in soil

<b>Mobility</b>	The product is soluble in water.
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<b>Mobility</b>	The product is water-soluble and may spread in water systems.
<b>Adsorption/desorption coefficient</b>	Scientifically unjustified.

#### 12.5. Results of PBT and vPvB assessment

<b>Results of PBT and vPvB assessment</b>	This substance is not classified as PBT or vPvB according to current EU criteria.
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<b>Results of PBT and vPvB assessment</b>	This substance is not classified as PBT or vPvB according to current EU criteria.
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#### 12.6. Other adverse effects

<b>Other adverse effects</b>	None known.
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<b>Other adverse effects</b>	None known.
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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>General information</b>	The generation of waste should be minimised or avoided wherever possible. When handling waste, the safety precautions applying to handling of the product should be considered.
<b>Disposal methods</b>	Reuse or recycle products wherever possible. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

## SECTION 14: Transport information

## POTASSIUM IODIDE 5% w/v

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78  
and the IBC Code**

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

<b>National regulations</b>	Control of Substances Hazardous to Health Regulations 2002 (as amended). EH40/2005 Workplace exposure limits.
<b>EU legislation</b>	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
<b>Guidance</b>	Workplace Exposure Limits EH40.
<b>Health and environmental listings</b>	None of the ingredients are listed.
<b>Authorisations (Title VII Regulation 1907/2006)</b>	No specific authorisations are known for this product.
<b>Restrictions (Title VIII Regulation 1907/2006)</b>	No specific restrictions on use are known for this product.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### Inventories

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### EU - EINECS/ELINCS

All the ingredients are listed or exempt.

### SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. DNEL: Derived No Effect Level. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. PNEC: Predicted No Effect Concentration. RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail. SVHC: Substances of Very High Concern. cATpE: Converted Acute Toxicity Point Estimate. DMEL: Derived Minimal Effect Level.
<b>Classification abbreviations and acronyms</b>	Acute Tox. = Acute toxicity STOT RE = Specific target organ toxicity-repeated exposure Eye Irrit. = Eye irritation Skin Irrit. = Skin irritation
<b>General information</b>	Only trained personnel should use this material.
<b>Key literature references and sources for data</b>	Source: European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a>
<b>Classification procedures according to Regulation (EC) 1272/2008</b>	STOT RE 2 - H373: Calculation method.
<b>Revision comments</b>	Revised classification.
<b>Revision date</b>	25/07/2018
<b>Revision</b>	1
<b>Supersedes date</b>	23/09/2008
<b>SDS number</b>	10854
<b>SDS status</b>	Approved.
<b>Risk phrases in full</b>	Not classified.
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H372 Causes damage to organs (Thyroid) through prolonged or repeated exposure. H373 May cause damage to organs through prolonged or repeated exposure.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.