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

1.4. Emergency telephone number
Emergency telephone OHES Environmental Ltd 24-7
Tel. 0333 333 9939 (24 hour)

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.
POTASSIUM IODIDE 5% w/v

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

<table>
<thead>
<tr>
<th>POTASSIUM IODIDE</th>
<th>5-10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 7681-11-0</td>
<td>EC number: 231-659-4</td>
</tr>
</tbody>
</table>

Classification
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT RE 1 - H372

Classification (67/548/EEC or 1999/45/EC)
-

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.
POTASSIUM IODIDE 5% w/v

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
POTASSIUM IODIDE 5% w/v

Usage precautions
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.

Advice on general occupational hygiene
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

Storage precautions
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.

Storage class
Chemical storage.

7.3. Specific end use(s)
Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

POTASSIUM IODIDE (CAS: 7681-11-0)

DNEL
Workers - Inhalation; Long term systemic effects: 0.07 mg/m³
Workers - Dermal; Long term systemic effects: 1 mg/kg/day
General population - Inhalation; Long term systemic effects: 0.035 mg/m³
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

PNEC
- Fresh water; 0.007 mg/l
- Intermittent release; 0.075 mg/l
- Sediment (Freshwater); 0.007 mg/kg

8.2. Exposure controls

Protective equipment
Provide adequate general and local exhaust ventilation.

Appropriate engineering controls

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.
POTASSIUM IODIDE 5% w/v

Hygiene measures
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.

Respiratory protection
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.

Environmental exposure controls
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

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

9.2. Other information

Other information
None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity
There are no known reactivity hazards associated with this product.

10.2. Chemical stability

5/11
POTASSIUM IODIDE 5% w/v

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 LD₅₀)
No specific test data are available.

ATE oral (mg/kg) 10,000.0

Acute toxicity - dermal
Notes (dermal LD₅₀)
No specific test data are available.

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
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.
POTASSIUM IODIDE 5% w/v

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.

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

Acute toxicity - oral
Notes (oral LD₅₀) Acute Tox. 4 - H302 Harmful if swallowed. LD₅₀ 3118 mg/kg, Oral, Rat
ATE oral (mg/kg) 500.0

Acute toxicity - dermal
Notes (dermal LD₅₀) Acute Tox. 4 - H312 Harmful in contact with skin.

Acute toxicity - inhalation
Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation 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
POTASSIUM IODIDE 5% w/v

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.

POTASSIUM IODIDE

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.

POTASSIUM IODIDE

Toxicity  Based on available data the classification criteria are not met.

Acute toxicity - fish  LC₅₀, 96 hours: 3780 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates  EC₅₀, 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.
POTASSIUM IODIDE 5% w/v

POTASSIUM IODIDE

Persistence and degradability
The degradability of the product is not known.

Stability (hydrolysis)
Scientifically unjustified.

Biodegradation
Scientifically unjustified.

12.3. Bioaccumulative potential
Bioaccumulative potential
The product does not contain any substances expected to be bioaccumulating.

Partition coefficient
Not determined.

12.4. Mobility in soil
Mobility
The product is soluble in water.

12.5. Results of PBT and vPvB assessment
Results of PBT and vPvB assessment
This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects
Other adverse effects
None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
General information
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.

Disposal methods
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 Annex II of MARPOL 73/78 and the IBC Code  
Not applicable.

SECTION 15: Regulatory information

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

National regulations  
Control of Substances Hazardous to Health Regulations 2002 (as amended).  
EH40/2005 Workplace exposure limits.

EU legislation  

Guidance  
Workplace Exposure Limits EH40.

Health and environmental listings  
None of the ingredients are listed.

Authorisations (Title VII Regulation 1907/2006)  
No specific authorisations are known for this product.

Restrictions (Title VIII Regulation 1907/2006)  
No specific restrictions on use are known for this product.

15.2. Chemical safety assessment  
No chemical safety assessment has been carried out.

Inventories
# POTASSIUM IODIDE 5% w/v

**EU - EINECS/ELINCS**
All the ingredients are listed or exempt.

## SECTION 16: Other information

<table>
<thead>
<tr>
<th>Abbreviations and acronyms used in the safety data sheet</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR:</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road.</td>
</tr>
<tr>
<td>DNEL:</td>
<td>Derived No Effect Level.</td>
</tr>
<tr>
<td>IATA:</td>
<td>International Air Transport Association.</td>
</tr>
<tr>
<td>IMDG:</td>
<td>International Maritime Dangerous Goods.</td>
</tr>
<tr>
<td>PNEC:</td>
<td>Predicted No Effect Concentration.</td>
</tr>
<tr>
<td>RID:</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Rail.</td>
</tr>
<tr>
<td>SVHC:</td>
<td>Substances of Very High Concern.</td>
</tr>
<tr>
<td>cATpE:</td>
<td>Converted Acute Toxicity Point Estimate.</td>
</tr>
<tr>
<td>DMEL:</td>
<td>Derived Minimal Effect Level.</td>
</tr>
</tbody>
</table>

### Classification abbreviations and acronyms
- **Acute Tox.** = Acute toxicity
- **STOT RE** = Specific target organ toxicity-repeated exposure
- **Eye Irrit.** = Eye irritation
- **Skin Irrit.** = Skin irritation

### General information
Only trained personnel should use this material.

### Key literature references and sources for data

### Classification procedures according to Regulation (EC) 1272/2008
STOT RE 2 - H373: Calculation method.

### Revision comments
Revised classification.

### Revision details
- **Revision date**: 25/07/2018
- **Revision**: 1
- **Supersedes date**: 23/09/2008
- **SDS number**: 10854
- **SDS status**: Approved.
- **Risk phrases in full**: Not classified.
- **Hazard statements in full**:
  - 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.