SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: IODINE 0.05M
Product number: 1049

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.
IODINE 0.05M

Precautionary statements
P260 Do not breathe vapour/spray.
P314 Get medical advice/attention if you feel unwell.
P501 Dispose of contents/container in accordance with national regulations.

Contains
POTASSIUM IODIDE, IODINE

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>Ingredient</th>
<th>Percentage</th>
<th>CAS number</th>
<th>EC number</th>
<th>REACH registration number</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTASSIUM IODIDE</td>
<td>1-5%</td>
<td>7681-11-0</td>
<td>231-659-4</td>
<td>01-2119966161-40-0000</td>
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<tr>
<td>Classification</td>
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<td></td>
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<tr>
<td>Acute Tox. 4 - H302</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin Irrit. 2 - H315</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>STOT RE 1 - H372</td>
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</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Percentage</th>
<th>CAS number</th>
<th>EC number</th>
<th>REACH registration number</th>
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</thead>
<tbody>
<tr>
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<td>Acute Tox. 4 - H312</td>
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<tr>
<td>Acute Tox. 4 - H332</td>
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<td>Skin Irrit. 2 - H315</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Eye Irrit. 2 - H319</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STOT SE 3 - H335</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>STOT RE 1 - H372</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic Acute 1 - H400</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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
Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Inhalation
Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
IODINE 0.05M

Ingestion
Rinse mouth thoroughly with water. Remove any dentures. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Skin contact
Rinse with water.

Eye contact
Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing.

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
See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation
Prolonged inhalation of high concentrations may damage respiratory system.

Ingestion
Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

Skin contact
Prolonged contact may cause dryness of the skin.

Eye contact
May cause temporary eye irritation.

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

Notes for the doctor
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products
Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Iodine compounds

5.3. Advice for firefighters
Protective actions during firefighting
Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

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
IODINE 0.05M

**Personal precautions**
No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material.

**6.2. Environmental precautions**

**Environmental precautions**
Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

**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. Clear up spills immediately and dispose of waste safely. Approach the spillage from upwind. Small Spillages: If the product is soluble in water, dilute the spillage with water and mop it up. Alternatively, or if it is not water-soluble, absorb the spillage with an inert, dry material and place it in a suitable waste disposal container. Large Spillages: If leakage cannot be stopped, evacuate area. Flush spilled material into an effluent treatment plant, or proceed as follows. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

**6.4. Reference to other sections**

**Reference to other sections**
For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Usage precautions**
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment.

**Advice on general occupational hygiene**
Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. 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. Change work clothing daily before leaving workplace.

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

**Storage precautions**
Store away from incompatible materials (see Section 10). Store in accordance with local regulations. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers from damage. Bund storage facilities to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

**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.
IODINE 0.05M

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

IODINE

Short-term exposure limit (15-minute):  WEL 0.1 ppm  1.1 mg/m³
WEL = Workplace Exposure Limit

<table>
<thead>
<tr>
<th>POTASSIUM IODIDE (CAS: 7681-11-0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
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<tr>
<td>Workers - Inhalation; Long term systemic effects: 0.07 mg/m³</td>
</tr>
<tr>
<td>Workers - Dermal; Long term systemic effects: 1 mg/kg/day</td>
</tr>
<tr>
<td>General population - Inhalation; Long term systemic effects: 0.035 mg/m³</td>
</tr>
<tr>
<td>General population - Dermal; Long term systemic effects: 1 mg/kg</td>
</tr>
<tr>
<td>General population - Oral; Long term systemic effects: 0.01 mg/kg/day</td>
</tr>
<tr>
<td>General population - Oral; Long term systemic effects: 0.01 mg/kg</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PNEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Fresh water; 0.007 mg/l</td>
</tr>
<tr>
<td>- Intermittent release; 0.075 mg/l</td>
</tr>
<tr>
<td>- Sediment (Freshwater); 0.007 mg/kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IODINE (CAS: 7553-56-2)</th>
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</thead>
<tbody>
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<td>DNEL</td>
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</tr>
<tr>
<td>Workers - Dermal; Long term systemic effects: 0.01 mg/kg</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>PNEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Fresh water; 18.13µg/L</td>
</tr>
<tr>
<td>- Marine water; 60.01µg/L</td>
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<tr>
<td>- STP; 11 mg/l</td>
</tr>
<tr>
<td>- Sediment (Freshwater); 3.99 mg/kg</td>
</tr>
<tr>
<td>- Sediment (Marinewater); 20.22 mg/kg</td>
</tr>
<tr>
<td>- Soil; 5.95 mg/kg</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure.

Eye/face protection

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.
IODINE 0.05M

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures
Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. 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. Ensure all respiratory protective equipment is suitable for its intended use and is ‘CE’-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls
Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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>
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<tr>
<td>Colour</td>
<td>Dark brown</td>
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<tr>
<td>Odour</td>
<td>Slight pungent</td>
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<tr>
<td>pH</td>
<td>Not determined</td>
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<tr>
<td>Melting point</td>
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<tr>
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<tr>
<td>Flash point</td>
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<tr>
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<tr>
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<td>Relative density</td>
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<td>Solubility(ies)</td>
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<tr>
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<tr>
<td>Auto-ignition temperature</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
IODINE 0.05M

Viscosity
Not determined.

Explosive properties
Not considered to be explosive.

Oxidising properties
Does not meet the criteria for classification as oxidising.

9.2. Other information
None.

SECTION 10: Stability and reactivity

10.1. Reactivity
Reactivity
The following materials may react with the product: Acids. Oxidising agents. Chemically-active metals.

10.2. Chemical stability
Stability
Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
No potentially hazardous reactions known. May generate heat. Pressure may build up if reaction occurs in a sealed container.

10.4. Conditions to avoid
Conditions to avoid
Avoid heat. Containers can burst violently or explode when heated, due to excessive pressure build-up. Avoid freezing.

10.5. Incompatible materials
Materials to avoid

10.6. Hazardous decomposition products
Hazardous decomposition products
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. Iodine Hydrogen Iodide Oxides of the following substances: Potassium.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Other health effects
Contains potassium iodide. Risk of sensitisation with allergic reactions among sensitive individuals.

Acute toxicity - oral
Notes (oral LD₅₀)
Based on available data the classification criteria are not met.
ATE oral (mg/kg)
15,243.9

Acute toxicity - dermal
Notes (dermal LD₅₀)
Based on available data the classification criteria are not met.
ATE dermal (mg/kg)
111,328.13

Acute toxicity - inhalation
Notes (inhalation LC₅₀)
Based on available data the classification criteria are not met.
ATE inhalation (dusts/mists mg/l)
358.44

Skin corrosion/irritation
IODINE 0.05M

Animal data
Serious eye damage/irritation
Serious eye damage/irritation
Respiratory sensitisation
Respiratory sensitisation
Skin sensitisation
Skin sensitisation
Germ cell mutagenicity
Genotoxicity - in vitro
Carcinogenicity
Carcinogenicity
IARC carcinogenicity
Reproductive toxicity
Reproductive toxicity - fertility
Reproductive toxicity - development
Specific target organ toxicity - single exposure
STOT - single exposure
Specific target organ toxicity - repeated exposure
STOT - repeated exposure
Aspiration hazard
Aspiration hazard
General information
Inhalation
Ingestion
Skin contact
Eye contact
Route of entry
Target organs

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

None of the ingredients are listed or exempt.

Based on available data the classification criteria are not met.

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

STOT RE 2 - H373 May cause damage to organs through prolonged or repeated exposure.

Based on available data the classification criteria are not met.

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

Prolonged inhalation of high concentrations may damage respiratory system.

Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.

Prolonged contact may cause dryness of the skin.

May cause temporary eye irritation.

Ingestion Inhalation Skin and/or eye contact

No specific target organs known.

POTASSIUM IODIDE

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

Acute toxicity - oral
Acute Tox. 4 - H302 Harmful if swallowed. LD₅₀ 3118 mg/kg, Oral, Rat

ATE oral (mg/kg)
500.0

Acute toxicity - dermal
IODINE 0.05M

**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**

**Animal data**

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

**Respiratory sensitisation**

**Skin sensitisation**

**Germ cell mutagenicity**

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

**Carcinogenicity**

**Reproductive toxicity - fertility**

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

**Germ cell mutagenicity**
Based on available data the classification criteria are not met.

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

**Reproductive toxicity**

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

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

**Aspiration hazard**

**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.
IODINE 0.05M

**IODINE**

**Acute toxicity - oral**

Notes (oral LD₅₀)

Acute Tox. 4 - H302 Harmful if swallowed.

ATE oral (mg/kg)

500.0

**Acute toxicity - dermal**

Acute toxicity dermal (LD₅₀ mg/kg)

1,425.0

Species

Rabbit

Notes (dermal LD₅₀)

Acute Tox. 4 - H312 Harmful in contact with skin. LD₅₀ 1425 mg/kg/day, Dermal, Rabbit

ATE dermal (mg/kg)

1,425.0

**Acute toxicity - inhalation**

Acute toxicity inhalation (LC₅₀ dust/mist mg/l)

4.588

Species

Rat

Notes (inhalation LC₅₀)

Acute Tox. 4 - H332 Harmful if inhaled. >4.588 (4 hour) mg/l, Inhalation, Rat

ATE inhalation (dusts/mists mg/l)

4.588

**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

- NOAEL 10 mg/kg, Oral, Rat F1

Reproductive toxicity - development

Developmental toxicity: - NOAEL: 10 mg/kg, Oral, Rat

**Specific target organ toxicity - single exposure**
IODINE 0.05M

STOT - single exposure
STOT SE 3 - H335 May cause respiratory irritation.

Target organs
Respiratory system, lungs

Specific target organ toxicity - repeated exposure
STOT RE 1 - H372 Causes damage to organs through prolonged or repeated exposure. NOAEL 10 mg/kg, Oral, Rat

Aspiration hazard
Based on available data the classification criteria are not met.

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

Inhalation
A single exposure may cause the following adverse effects: Headache. May cause respiratory irritation.

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

Skin contact
Irritating to skin.

Eye contact
Irritating to eyes.

Route of entry
Ingestion Inhalation Skin and/or eye contact

Target organs
Respiratory system, lungs

SECTION 12: Ecological Information

Ecotoxicity
Not regarded as dangerous for the environment. 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.

IODINE

Ecotoxicity
Very toxic to aquatic organisms.

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

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

IODINE
IODINE 0.05M

Toxicity
Aquatic Acute 1 - H400 Very toxic to aquatic life.

Acute aquatic toxicity
LE₅₀, 96 hours: 1.67 mg/l, Onchorhynchus mykiss (Rainbow trout)
EC₅₀, 72 hours: 0.13 mg/l, Desmodesmus subspicatus
EC₅₀, 3 hours: 280 mg/l, Activated sludge

Persistence and degradability
The product contains inorganic substances which are not biodegradable.

POTASSIUM IODIDE

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

Stability (hydrolysis)
Scientifically unjustified.

Biodegradation
Scientifically unjustified.

IODINE

Persistence and degradability
The product is not biodegradable.

Phototransformation
Air - DT₅₀ : 14 minutes

Biodegradation
Technically not feasible.

12.3. Bioaccumulative potential
Bioaccumulative potential
No data available on bioaccumulation.

Partition coefficient
Not determined.

POTASSIUM IODIDE

Bioaccumulative potential
Scientifically unjustified.

Partition coefficient
Scientifically unjustified.

IODINE

Bioaccumulative potential
Scientifically unjustified.

Partition coefficient
log Pow: 2.49 @ 20°C

12.4. Mobility in soil
Mobility
The product is water-soluble and may spread in water systems. The product contains volatile substances which may spread in the atmosphere.
IODINE 0.05M

POTASSIUM IODIDE

Mobility
The product is water-soluble and may spread in water systems.

Adsorption/desorption coefficient
Scientifically unjustified.

IODINE

Mobility
The product is partly soluble in water and may spread in the aquatic environment. The product contains volatile substances which may spread in the atmosphere. The product contains substances which may accumulate in sediment.

Adsorption/desorption coefficient
Soil - : Kd >0.13 <7.7 @ 25°C

Henry's law constant
0.033 Pa m³/mol @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment
This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects
None known.

POTASSIUM IODIDE

Other adverse effects
None known.

IODINE

Other adverse effects
None known. Will affect drinking water supplies.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information
The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.
IODINE 0.05M

Disposal methods
Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

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

14.1. UN number
Not applicable.

14.2. UN proper shipping name
Not applicable.

14.3. Transport hazard class(es)
Not applicable.

Transport labels
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
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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
Health and Safety at Work etc. Act 1974 (as amended).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.

EU legislation

Guidance
ECHA Guidance on the Compilation of Safety Datasheets
IODOINE 0.05M

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS
None of the ingredients are listed or exempt.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.

Classification abbreviations and acronyms
STOT RE = Specific target organ toxicity-repeated exposure

General information
This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons.

Key literature references and sources for data

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

Training advice
Only trained personnel should use this material.

Revision comments
Revised classification.

Revision date
19/09/2017

Revision
2

Supersedes date
09/01/2012

SDS number
10694

Risk phrases in full
Not classified.
R20/21 Harmful by inhalation and in contact with skin.
R50 Very toxic to aquatic organisms.
IODINE 0.05M

Hazard statements in full

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
H372 Causes damage to organs (Thyroid) through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.

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.