

## SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.1 Revision Date 03.07.2012

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifiers

Product name : Potassium iodide

Product Number : 52-7524

Brand : Rapid

CAS-No. : 7681-11-0

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

Identified uses : Laboratory chemicals, Manufacture of substances

#### 1.3 Details of the supplier of the safety data sheet

Company : Rapid Electronics,  
Severalls Lane,  
Colchester,  
Essex,  
CO4 5JS, United Kingdom

Telephone : +44 (0) 1206 751166

Fax : +44 (0) 1206 751188

E-mail address : sales@rapidelec.co.uk

#### 1.4 Emergency telephone number

Emergency Phone # : +44 (0) 1206 751166

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2)

##### Classification according to EU Directives 67/548/EEC or 1999/45/EC

Harmful if swallowed. Irritating to eyes and skin.

#### 2.2 Label elements

##### Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram   
Signal word Warning

Hazard statement(s)  
H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Precautionary statement(s)  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements none

**According to European Directive 67/548/EEC as amended.**

Hazard symbol(s)



R-phrases

R22 Harmful if swallowed.  
R36/38 Irritating to eyes and skin.

S-phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**2.3 Other hazards - none**

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**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Formula : IK  
Molecular Weight : 166.00 g/mol

Component	Concentration
<b>Potassium iodide</b>	
CAS-No. 7681-11-0	-
EC-No. 231-659-4	

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**3.2 FIRST AID MEASURES**

**3.3 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**3.4 Most important symptoms and effects, both acute and delayed**

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

**3.5 Indication of any immediate medical attention and special treatment needed**

no data available

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**4. FIREFIGHTING MEASURES**

**4.1 Extinguishing media**

**Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**4.2 Special hazards arising from the substance or mixture**

Hydrogen iodide, Potassium oxides

**4.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

- 4.4 Further information**  
The product itself does not burn.

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**5. ACCIDENTAL RELEASE MEASURES**

- 5.1 Personal precautions, protective equipment and emergency procedures**  
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
- 5.2 Environmental precautions**  
Do not let product enter drains.
- 5.3 Methods and materials for containment and cleaning up**  
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 5.4 Reference to other sections**  
For disposal see section 13.

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**6. HANDLING AND STORAGE**

- 6.1 Precautions for safe handling**  
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
- 6.2 Conditions for safe storage, including any incompatibilities**  
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.  
  
Air, light, and moisture sensitive. Store under inert gas.
- 6.3 Specific end uses**  
no data available

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**7. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**7.1 Control parameters**

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**7.2 Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Immersion protection**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: > 480 min

Material tested: Dermatril® (Aldrich Z677272, Size M)

**Splash protection**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm  
Break through time: > 30 min  
Material tested: Dermatril® (Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, e-mail sales@kcl.de,  
test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an Industrial Hygienist familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## **8. PHYSICAL AND CHEMICAL PROPERTIES**

### **8.1 Information on basic physical and chemical properties**

- |   |                                    |
|---|------------------------------------|
| a) Appearance                                   | Form: crystalline<br>Colour: white |
| b) Odour  | no data available                  |
| c) Odour Threshold                              | no data available                  |
| d) pH   | 6.0 - 9 at 166 g/l at 25 °C        |
| e) Melting point/freezing point                 | Melting point/range: 681 °C        |
| f) Initial boiling point and boiling range      | 1,330 °C                           |
| g) Flash point                                  | no data available                  |
| h) Evaporation rate                             | no data available                  |
| i) Flammability (solid, gas)                    | no data available                  |
| j) Upper/lower flammability or explosive limits | no data available                  |
| k) Vapour pressure                              | 1 hPa at 745 °C                    |
| l) Vapour density                               | no data available                  |
| m) Relative density                             | 3.130 g/cm <sup>3</sup>            |
| n) Water solubility                             | no data available                  |
| o) Partition coefficient: n-octanol/water       | no data available                  |
| p) Autoignition temperature                     | no data available                  |
| q) Decomposition temperature                    | no data available                  |
| r) Viscosity                                    | no data available                  |
| s) Explosive properties                         | no data available                  |
| t) Oxidizing properties                         | no data available                  |

### **8.2 Other safety information**

Bulk density

1,700 kg/m<sup>3</sup>

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## 9. STABILITY AND REACTIVITY

### 9.1 Reactivity

no data available

### 9.2 Chemical stability

no data available

### 9.3 Possibility of hazardous reactions

no data available

### 9.4 Conditions to avoid

Tin/tin oxides

### 9.5 Incompatible materials

Strong reducing agents, Nickel, Strong acids, and its alloys, Steel (all types and surface treatments), Aluminum, Alkali metals, Brass, Magnesium, Zinc, cadmium, Copper

### 9.6 Hazardous decomposition products

Other decomposition products - no data available

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## 10. TOXICOLOGICAL INFORMATION

### 10.1 Information on toxicological effects

#### Acute toxicity

LD50 Oral - mouse - 1,000 mg/kg

#### Skin corrosion/irritation

Skin - rabbit - Irritating to skin.

#### Serious eye damage/eye irritation

Eyes - rabbit - Irritating to eyes. - 24 h - Draize Test

#### Respiratory or skin sensitization

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal goiter.

#### Specific target organ toxicity - single exposure

no data available

#### Specific target organ toxicity - repeated exposure

no data available

#### Aspiration hazard

no data available

#### Potential health effects

##### Inhalation

May be harmful if inhaled. Causes respiratory tract irritation.

##### Ingestion

Harmful if swallowed.

##### Skin

May be harmful if absorbed through skin. Causes skin irritation.

##### Eyes

Causes serious eye irritation.

#### Signs and Symptoms of Exposure

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the

skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

**Additional Information**

RTECS: TT2975000

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**11. ECOLOGICAL INFORMATION**

**11.1 Toxicity**

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 2,190 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia - 2.7 mg/l - 24 h

**11.2 Persistence and degradability**

no data available

**11.3 Bioaccumulative potential**

no data available

**11.4 Mobility in soil**

no data available

**11.5 Results of PBT and vPvB assessment**

no data available

**11.6 Other adverse effects**

no data available

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**12. DISPOSAL CONSIDERATIONS**

**12.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

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**13. TRANSPORT INFORMATION**

**13.1 UN number**

ADR/RID: - IMDG: - IATA: -

**13.2 UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**13.3 Transport hazard class(es)**

ADR/RID: - IMDG: - IATA: -

**13.4 Packaging group**

ADR/RID: - IMDG: - IATA: -

**13.5 Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

**13.6 Special precautions for user**

no data available

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**14. REGULATORY INFORMATION**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**14.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

## 14.2 Chemical Safety Assessment

no data available

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## 15. OTHER INFORMATION

### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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