

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifiers**Product name: **POTASSIUM IODATE**CAS-No.: **7758-05-6**Product Number: **A70452****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 : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,

UNITED KINGDOM

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Email: enquiries@philipharris.co.uk

1.4 Emergency telephone numberEmergency Phone #: **+44 (0)845 1200 506****2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****According to Regulation (EC) No1272/2008;** Oxidizing solids (Category 2), Skin irritation (Category 2), Eye irritation (Category 2), Specific target organ toxicity - single exposure (Category 3)**According to European Directive 67/548/EEC as amended:** Contact with combustible material may cause fire. Irritating to eyes, respiratory system and skin.**2.2 Label elements**

Pictogram



Signal word

Danger

Hazard statement(s): H272 May intensify fire; oxidiser. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.**Precautionary statement(s):** P220 Keep/Store away from clothing/ combustible materials. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Hazard symbol(s):**

R-phrases(s): R 8 Contact with combustible material may cause fire. R36/37/38 Irritating to eyes, respiratory system and skin.

S-phrases(s): S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other hazards – no data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Potassium iodate

Formula: **KIO₃**
Molecular Weight: **214.00**
CAS-No.: **7758-05-6**
EC-No.: **231-831-9**

4. FIRST AID MEASURES

4.1 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.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed: no data available

4.3 Indication of immediate medical attention and special treatment needed: no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture: no data available

5.3 Precautions for fire-fighters: Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information: Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions: Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place

in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections: For disposal see section 13.

7. HANDLING AND STORAGE

7.1 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. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Store in cool place.

7.3 Specific end uses: no data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Update
Acetic acid	64-19-7	TWA	10ppm 25mg/m ³	1991-07-05

Europe Commission Directive 91/322/EEC on establishing indicative limit values. Remarks Indicative.

8.2 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.

Body Protection: Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- a) Appearance: **Form:** Powder **Colour:** White
- b) Odour: Pungent
- c) Odour Threshold: no data available
- d) pH: no data available
- e) Melting/freezing point: 560 °C Melting point/range: no data available
- f) Initial boiling point and boiling range: no data available
- 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: no data available
- l) Vapour density: no data available
- m) Relative density: 3.93 g/cm³ at 25 °C
- 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
- 9.2 Other safety information:** no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity: no data available

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: no data available

10.4 Conditions to avoid: no data available

10.5 Incompatible materials: Strong reducing agents, Powdered metals, Incompatibility: mixtures of iodates with finely divided aluminium, arsenic, copper, carbon, phosphorous (red or white) sulphur; hydrides of alkali and alkaline earth metals; sulphides of antimony, arsenic, copper or tin, metal cyanides, thiocyanates or impure manganese dioxide may react violently or explosively, either spontaneously (especially in the presence of moisture) or on initiation by heat, friction impact, sparks, or addition of sulphuric acid

10.6 Hazardous decomposition products: formed under fire conditions. - Hydrogen iodide, Potassium oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: LDLO Oral - mouse - 531 mg/kg

LDLO Oral - guinea pig - 400 mg/kg

LD50 Intraperitoneal - mouse - 136 mg/kg Remarks: Behavioural: Convulsions or effect on seizure threshold. Behavioural: Excitement. Lungs, Thorax, or Respiration: Other changes.

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: Irritating to eyes, respiratory system and skin.

Respiratory or skin sensitization: no data available

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 foetal hypothyroidism. Iodine-containing drugs have been associated with foetal goiter.

Specific target organ toxicity - single exposure: Inhalation - May cause respiratory irritation.

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 May be harmful if swallowed.

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

Eyes Causes serious eye irritation.

Signs and Symptoms of Exposure: Nausea, Vomiting, Diarrhoea, Rash

Additional Information: RTECS: NN1350000

12. ECOLOGICAL INFORMATION

12.1 Toxicity: no data available

12.2 Persistence and degradability: no data available

12.3 Bioaccumulative potential: no data available

12.4 Mobility in soil: no data available

12.5 Results of PBT and vPvB assessment: no data available

12.6 Other adverse effects: no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR/RID: 1479 IMDG: 1479 IATA: 1479

14.2 UN proper shipping name

ADR/RID: OXIDIZING SOLID, N.O.S. (Potassium iodate)

IMDG: OXIDIZING SOLID, N.O.S. (Potassium iodate)

IATA: OXIDIZING SOLID, N.O.S. (Potassium iodate)

14.3 Transport hazard class(es)

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

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

14.6 Special precautions for users: EMS-No: F-A, S-Q

15. REGULATORY INFORMATION

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

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available

15.2 Chemical Safety Assessment: no data available

16. OTHER INFORMATION

Eye Irrit. Eye irritation

H272 May intensify fire; oxidiser.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Ox. Sol. Oxidizing solids

Skin Irrit. Skin irritation

STOT SE Specific target organ toxicity - single exposure

O Oxidising

Xi Irritant

R 8 Contact with combustible material may cause fire.

R36/37/38 Irritating to eyes, respiratory system and skin.