

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product name:** POTASSIUM THIOCYANATE  
**CAS number:** 333-20-0  
**EINECS number:** 206-370-1  
**Index number:** 615-030-00-5  
**Product code:** A70592  
**Synonyms:** POTASSIUM RHODANIDE

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

**Use of substance / mixture:** Laboratory Chemicals, Manufacture of Substances.

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

**Company name:** PHILIP HARRIS  
2 Gregory Street  
Hyde  
Cheshire  
SK14 4HR  
United Kingdom  
**Tel:** +44 (0)845 1200 506  
**Fax:** +44 (0)161 367 2140  
**Email:** [enquiries@philipharris.co.uk](mailto:enquiries@philipharris.co.uk)

### 1.4. Emergency telephone number

**Emergency tel:** +44 (0) 845 1200 506

## Section 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification under CLP:** Acute Tox. 4: H302; Aquatic Chronic 3: H412; Acute Tox. 4: H312; Acute Tox. 4: H332; -: EUH032

**Most important adverse effects:** Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Harmful to aquatic life with long lasting effects. Contact with acids liberates very toxic gas.

### 2.2. Label elements

**Label elements:**

**Hazard statements:** H302: Harmful if swallowed.  
H312: Harmful in contact with skin.  
H332: Harmful if inhaled.  
H412: Harmful to aquatic life with long lasting effects.  
EUH032: Contact with acids liberates very toxic gas.

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**Signal words:** Warning

**Hazard pictograms:** GHS07: Exclamation mark



**Precautionary statements:** P264: Wash hands thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P301+312: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell.  
P330: Rinse mouth.  
P501: Dispose of contents/container to hazardous or special waste collection point.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

## 2.3. Other hazards

**Other hazards:** The substance is not classified as hazardous to health or the environment according to the CLP regulation. This substance is not classified as dangerous according to Directive 67/548/EEC.

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** POTASSIUM THIOCYANATE

**CAS number:** 333-20-0

**EINECS number:** 206-370-1

**Contains:** Molecular formula : KI

Molecular weight (g/mol) : 166 g/mol

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin. Consult a doctor.

**Eye contact:** Bathe the eye with running water for 15 minutes. Remove contact lenses, if present and easy to do. Consult a doctor.

**Ingestion:** Wash out mouth with water. Never give anything by mouth to an unconscious person. Give nothing to eat or drink. Consult a doctor.

**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor.

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

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

[cont...]

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**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

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

**Immediate / special treatment:** IF exposed or if you feel unwell: Call a POISON CENTRE or DOCTOR. Show this safety data sheet to the doctor in attendance. The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings. Dry chemical powder.

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

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion emits toxic fumes of nitrogen oxides. In combustion emits toxic fumes of sulphur oxides.  
Potassium oxides

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus.

## Section 6: Accidental release measures

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

**Personal precautions:** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. Refer to section 8 of SDS for personal protection details.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Discharge into the environment must be avoided.

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

**Clean-up procedures:** Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

### 6.4. Reference to other sections

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2

[cont...]

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

**Storage conditions:** Storage temperature 15-25°C Keep container tightly closed. Store in a cool, well ventilated area.

## 7.3. Specific end use(s)

**Specific end use(s):** Apart from uses mentioned in section 1.2 no other specific uses are stipulated.

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Technical measures and the application of suitable work processes have priority over personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full face particle respirator type N100 (US) or type P3 (EN143) respirator cartridges as a back up to engineering controls.

**Hand protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use.

Wash and dry hands. Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M) Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

**Eye protection:** Face shield and safety glasses. Use equipment for eye protection test and approved under appropriate government statements such as NIOSH (US) or EN 166(EU)

**Skin protection:** Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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## Section 9: Physical and chemical properties

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

**State:** Solid

**Colour:** No data available

**Odour:** No data available

**Evaporation rate:** No data available.

**Oxidising:** No data available.

**Solubility in water:** No data available.

**Also soluble in:** No data available.

**Viscosity:** No data available.

**Viscosity test method:** No data available.

**Boiling point/range°C:** No data available.

**Flammability limits %: lower:** No data available.

**Flash point°C:** No data available.

**Autoflammability°C:** No data available.

**Relative density:** 1.890 g/cm<sup>3</sup> (20°C)

**VOC g/l:** No data available.

**Melting point/range°C:** 173

**upper:** No data available.

**Part.coeff. n-octanol/water:** No data available.

**Vapour pressure:** No data available.

**pH:** 5.3-8.7

### 9.2. Other information

**Other information:** No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity:** No data available.

### 10.2. Chemical stability

**Chemical stability:** Stable at room temperature.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** No data available.

### 10.4. Conditions to avoid

**Conditions to avoid:** Tin / Tin Oxides

### 10.5. Incompatible materials

**Materials to avoid:** Strong reducing agents. Nickel. Strong acids. Alkali metals. Aluminium. Zinc.  
Magnesium. Brass Copper.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes. In the event of fire see section 5.

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## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicity values:

Route	Species	Test	Value	Units
ORAL	RAT	LD50	854	mg/kg

#### Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	INH DRM ING	Hazardous: calculated

### Symptoms / routes of exposure

**Skin contact:** There may be mild irritation at the site of contact.

**Eye contact:** There may be irritation and redness.

**Ingestion:** May be harmful if swallowed.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

## Section 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity values:** No data available.

### 12.2. Persistence and degradability

**Persistence and degradability:** No data available.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** Partition coefficient: n-octanol/water 0.04 (20°C)

### 12.4. Mobility in soil

**Mobility:** No data available.

### 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### 12.6. Other adverse effects

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Disposal of packaging:** Dispose of as unused product.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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## Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

## Section 15: Regulatory information

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

**15.2. Chemical Safety Assessment**

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** EUH032: Contact with acids liberates very toxic gas.

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H332: Harmful if inhaled.

H412: Harmful to aquatic life with long lasting effects.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.