A MATERIAL SAFETY DATA SHEET
POTASSIUM IODIDE

1.1 Product Identifiers:

Product Name : Potassium Iodide

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

Supplier: Infinium Pharmachem Pvt. Ltd. (AN ISO 9001:2008 CERTIFIED CO.)
38, G.I.D.C, Sojitra
Dist: ANAND
Gujarat, India

Tel : 0091-2697-234987
Fax : 0091-2697-234987
Email : info@infiniumpharmachem.com

Synonyms : Potide; hydriodic acid, potassium salt; Iodic acid, potassium salt; potassium; Kaliumiodid; Pherajod; Kalii iodidum; Kali iodide; Potassium iodide (KI); Potassium diiodide; Tripotassium triiodide; Potassium iodide (JP14/USP); 3,4,5-Trihydroxy benzoic acid; Potassium Iodide 45% Soln; Thyroblock(TN); Knollide; Kisol; Asmofug E; Mudrane Tablets; Yoduro de potasoi; Iodure de potassium; Iodure de potassium
CAS No. : 7681-11-0  
Molecular Weight : 166.00 g/mol  
Chemical Formula : KI  

3.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]  
Acute toxicity, Oral (Category 4), H302  
Skin irritation (Category 2), H315  
Eye irritation (Category 2), H319  
For the full text of the H-Statements mentioned in this Section, see Section 16.  
Classification according to EU Directives 67/548/EEC or 1999/45/EC  
Xn Harmful R22  
Xi Irritant R36/38  
For the full text of the R-phrases mentioned in this Section, see Section 16.  

3.2 Label elements  
Labeling according Regulation (EC) No 1272/2008  

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 None

3.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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. 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.

4.2 Most Important symptoms & efforts, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 3.2) and/or in section 1
4.3 Indication of any immediate medical attention and special treatment needed

No data available

5.1 Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Hydrogen Iodide, Potassium oxides.

5.3 Advice for firefighters

Wear self contained breathing apparatus for fighting if necessary.

5.4 Further Information

No data available.

6.1 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.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 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.

6.4 Reference to other sections

For disposal see section 13.

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.

7.2 Conditions for safe Storage, including any incompatibilities


7.3 Specific end uses

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8.1 Control parameters

Components with workplace control Parameters.

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
Face shield and safety glasses 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

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).

9.1 Information on Basic physical & chemical properties

- **a) Appearance** Form: crystalline
- **b) Odor** no data available
- **c) Odor Threshold** no data available
- **d) pH** 6 - 9 at 166 g/l at 25 °C
- **e) Melting point/freezing** 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** no data available
  Flammability or explosive limits
- **k) Vapor pressure** 1 hPa at 745 °C
- **l) Vapor density** no data available
- **m) Relative density** 3.130 g/cm³
- **n) Water solubility** no data available
- **o) Partition coefficient: n-octanol /water** no data available
- **p) Auto ignition** no data available
  Temperature
- **q) Decomposition** no data available
  Temperature
- **r) Viscosity** no data available
- **s) Explosive properties** no data available
- **t) Oxidizing properties** no data available

9.2 Other safety Information

- **Bulk Density** 1.700 kg/m³

10.1 Reactivity

no data available
10.2 Chemical stability
May decompose on exposure to air and moisture.
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
Tin / tin oxides.

10.5 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.

10.6 Hazardous decomposition products
Other decomposition products - no data available
In the event of fire: see section 5

11.1 Information on toxicological effects

Acute toxicity
LD 50 Oral – Mouse – 1.000 mg/kg

Skin corrosion/irritation
Skin- Rabbit
Result: Irritating to skin.

Serious eye damage/eye irritation
Eyes- Rabbit
Result : 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 presents 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

Additional Information
RTECS: TT2975000
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.

Liver - Irregularities - Based on Human Evidence

12.1 Persistence and degradability
no data available

12.2 Bioaccumulative potential
no data available

12.3 Mobility in soil
no data available
12.4 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.5 Toxicity

Toxicity to fish     LC50 - Oncorhynchus mykiss (rainbow trout) - 2.190 mg/l - 96 h
Toxicity to daphnia & EC50 - Daphnia (water flea) - 2.7 mg/l - 24 h
other aquatic invertebrates

12.6 Other adverse effects

No data available

13.1 Waste treatment methods

Product

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.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: -         IMDG: -         IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -         IMDG: -         IATA: -

14.4 Packaging group

ADR/RID: -         IMDG: -         IATA: -

14.5 Environmental hazards

ADR/RID: no         IMDG Marine pollutant: no         IATA: no
14.6 Special precautions for user
no data available

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

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity
Eye Irrit. Eye irritation
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
Skin Irrit. Skin irritation

Full text of R-phrases referred to under sections 2 and 3

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

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