

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

1.1. Product identifier

Product name : POTASSIUM IODIDE USP / BP Grade
REACH registration number : 01-2119966161-40-XXXX
CAS Number : 7681-11-0
EC Number : 231-659-4

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

1.2.1. Relevant identified uses

Main use category : Manufacturing of polymer and plastic products including compounding and conversion. Formulation [mixing] of preparations including food additives, cleaning products, offshore drilling and pharmaceutical applications. Manufacture of synthesis of fine chemicals and pharmaceuticals. Re-packing operations. Uses of potassium iodide as cleaning, washing or disinfecting agent. Some grades of this substance are available for feed/food use; feed additive (3b201).

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Vet Way Ltd
Airfield Business Park
Elvington
York
YO41 4EA
+44 (0) 1904 607 600
info@vet-way.com www.vet-way.com

1.4. Emergency telephone number

+44 (0) 1904 607 600

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Physical Hazards	Not Classified
Health Hazards	H372
Environmental Hazards	Not Classified

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

Signal word (CLP) :

Danger

Potassium Iodide

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hazard statements (CLP)	: H372 Causes damage to organs (Thyroid Gland) through prolonged or repeated exposure if swallowed.
Precautionary statements (CLP)	: P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product P314 - Get medical advice/attention if you feel unwell. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria

SECTION 3: Composition/information on ingredients

3.1. Substances

Product Names	POTASSIUM IODIDE USP / BP Grade
Reach Registration Number	01-2119966161-40-XXXX
CAS Number	7681-11-0
EC Number	231-659-4
Composition comments	Purity > 99%

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Remove affected person from source of contamination. Move affected person to fresh air at once. Get medical attention if any discomfort continues
First-aid measures after skin contact	: Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water.
First-aid measures after eye contact	: Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.
First-aid measures after ingestion	: Immediately rinse mouth and provide fresh air. Immediately rinse mouth and drink plenty of water (200-300ml). Do not induce vomiting. If vomiting occurs, the head should be kept low so that the stomach vomit doesn't enter lungs. Get medical attention

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

Symptoms/effects	: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Symptoms/effects after inhalation	: Dust may irritate respiratory system. Symptoms following over exposure may include the following: coughing.
Symptoms/effects after skin contact	: May cause irritation. Discolouration of skin.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: Nausea, vomiting. Iodine is essential for synthesis of thyroid hormones. Exposure to excess iodine may produce hypothyroidism or hyperthyroidism

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Suitable extinguishing media for the surrounding fire should be used.
Unsuitable extinguishing media	: Water may be less effective than alternatives

Potassium Iodide

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : Thermal decomposition or combustion products may include the following substances: Iodine. Hydrogen iodide.

5.3. Advice for firefighters

Protective actions during firefighting : Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Control run-off water by containing and keeping it out of sewers and watercourses.

Protection during firefighting : Regular protection may not be safe. Wear chemical protective suit. 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

General measures : Avoid inhalation of dust. Provide adequate ventilation. Avoid contact with skin, eyes and clothing.
Wear protective clothing as described in section 8 of this safety data sheet. Wash thoroughly after dealing with a spillage.

6.1.1. For non emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Spillages or uncontrolled contamination of soil or discharges into watercourses, drains or sewers must be reported immediately to the Environment Agency, local water company or other appropriate regulatory bodies. Do not allow to contaminate vegetation, or enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Avoid generation and spreading of dust
Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into suitable waste disposal containers and seal securely.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For waste disposal, see Section 12

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid spilling. Avoid contact with skin and eyes.
Avoid handling which leads to dust formation. Provide adequate ventilation.
Wear protective clothing as described in section 8.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep in the original packaging. Store in a cool dry well-ventilated area out of direct sunlight.
Store at temperatures between 15°C and 30°C.
Store away from incompatible materials (see section 10)

Storage Class : Chemical storage

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

Potassium Iodide

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL	Workers - Inhalation; Long term systemic effects: 0.07 mg/m ³ Workers - Dermal; Long term systemic effects: 1 mg/kg/day General population - Inhalation; Long term systemic effects: 0.035 mg/m ³ General population - Dermal; Long term systemic effects: 1 mg/kg/day General population - Oral; Long term systemic effects: 0.01 mg/kg/day General population - Oral; Short term systemic effects: 0.01 mg/kg/day
PNEC	- Fresh water; 0.0075 mg/l - Intermittent release; 0.075 mg/l - Sediment (Freshwater); 0.0075 mg/kg sediment dw

8.2. Exposure controls

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Crystalline powder
Colour	: White
Odour	: Odourless.
pH	: pH (diluted solution): 6-9 : 50 g/l H ₂ O @ 20°C
Melting Point	: 681 °C
Initial boiling point and range	: 1323°C
Flash point	: None applicable
Relative density	: 3.12
Solubility	: Soluble in water. 1429g/l water @ 25°C
Viscosity, dynamic	: Not applicable
Vapour Pressure	: Endpoint waived according to REACH Annex VII, IX or XI. Unjustified as the melting point > 300°C

9.2. Other information

Molecular Weight	: 166.01
------------------	----------

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts violently with strong acids.

The following products may react violently with the product: strong oxidising agents. Strong reducing agents

10.2. Chemical stability

The substance is hygroscopic and will absorb water by contact with the moisture in the air.

Protect from moisture. Protect from sunlight.

10.3. Possibility of hazardous reactions

Reactions with the following materials may cause explosions:

Alkali metals. Ammonia. Hydrogen peroxide (H₂O₂). Fluorine perchlorate. Perchloryl fluoride. Bromine pentafluoride.

The following products may react violently with the product: Fluorine.

Potassium Iodide

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight. Water, moisture.

10.5. Incompatible materials

Material to avoid: Strong oxidising agents. Strong reducing agents. Powdered metal. Strong acids. Water, moisture. Ammonia. Hydrogen peroxide (H2O2). Alkali metals. Fluorine. Fluorine perchlorate. Perchloryl fluoride. Bromine pentafluoride. Fluorine.

10.6. Hazardous decomposition products

Hazardous decomposition products: Hydrogen iodide. Iodine compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: LD ₅₀ 3118 mg/kg Oral, Rat Test methods: equivalent or similar to OECD 401. Based on available data the classification criteria are not met.
Acute toxicity (dermal)	: Absorption of iodide by dermal route is negligible, the iodide can penetrate into stratum corneum (SC) but little can enter viable epidermis. Dermal route is an unlikely route of exposure. Based on available data the classification criteria are not met.
Acute toxicity (inhalation)	: Inhalation is not considered to be a likely route of exposure based on the physical properties of the substance.
Skin corrosion/irritation	: Weight of evidence. Human
Serious eye damage/irritation	: Slightly irritating. Weight of evidence.
Respiratory or skin sensitisation	: Weight of evidence human : Not sensitising
Germ cell mutagenicity	: Gene mutation: Negative. Test methods: equivalent or similar to OECD 476. Based on available data the classification criteria are not met Chromosome aberration: Negative. Test MethodsL equivalent or similar to OECD 487 Based on available data the classification criteria are not met
Carcinogenicity	: LOAEL 100mg/kg/day Oral, Rat Test method : equivalent or similar to OECD 453 Based on available data the classification criteria are not met
Reproductive toxicity	: Fertility – Based on available data the classification criteria are not met Development – Developmental toxicity – NOAEL – 50mg/kg/day, Oral, RAT Based on available data the classification criteria are not met
STOT-single exposure	: Not classified
STOT-repeated exposure	: NOAEL 0.01 mg/kg/day Oral, Human Causes damage to organs (Thyroid gland) through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity	: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
-------------	--

Potassium Iodide

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Acute toxicity – fish	: LC ₅₀ , 96 hours: 3780 mg/l, Oncorhynchus mykiss (Rainbow trout) Read-across data Sodium iodide Test Method(s): equivalent or similar to OECD 203
Acute toxicity – aquatic invertebrates	: EC ₅₀ , 48 hours: 7.5 mg/l, Daphnia magna Test method(s): equivalent or similar to OECD 202
Acute toxicity – aquatic plants	: Toxicological threshold, 7 days: 2370 mg/l, Scenedesmus quadricauda Read-across data Sodium Iodide
Acute toxicity – microorganisms	: Microbial toxicity is unlikely to occur Expected to have a low potential for absorption

Not rapidly degradable

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Potassium Iodide

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority

SECTION 14: Transport information

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

14.1. UN number

Not Applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

Potassium Iodide

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

14.5. Environmental hazards

Dangerous for the environment : No

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU Regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Potassium Iodide

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

SECTION 16: Other information

Abbreviations and acronyms:

ATE: Acute Toxicity Estimate.
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.
CAS: Chemical Abstracts Service.
DNEL: Derived No Effect Level.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
Kow: Octanol-water partition coefficient.
LC₅₀: Lethal Concentration to 50 % of a test population.
LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
vPvB: Very Persistent and Very Bioaccumulative.
IARC: International Agency for Research on Cancer.
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
cATpE: Converted Acute Toxicity Point Estimate.
BCF: Bioconcentration Factor.
BOD: Biochemical Oxygen Demand.
EC₅₀: 50% of maximal Effective Concentration.
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
LOEC: Lowest Observed Effect Concentration.
DMEL: Derived Minimal Effect Level.
EL50: Exposure Limit 50
hPa: Hectopascal
LL50: Lethal Loading fifty
OECD: Organisation for Economic Co-operation and Development
POW: Octanol-water partition coefficient
SCBA: self-contained breathing apparatus
STP: Sewage Treatment Plant
VOC: Volatile Organic Compounds

Data sources : Manufacturers Material Safety Data Sheets.
Other information : The Risk Phrases / Hazard Statements listed below in this Section No 16 relate to the Raw Materials (Ingredients) in the Product (as listed in Section 3) and NOT the product itself. For the Risk Phrases / Hazard Statements relating to this Product see Section 2.
Legal Disclaimer : The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith.

Full text of H- and EUH-statements:

H372	Causes damage to organs (Thyroid gland) through prolonged or repeated exposure if swallowed.
------	--

SDS EU (REACH Annex II)

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.