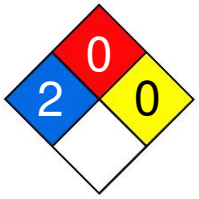
Material Safety Data Sheets



Revision 2

1. IDENTIFICATION

Product Name	**Potassium Iodide**
Other Names	Hydriodic Acid, Potassium Salt; Iodic Acid, Potassium Salt; POTASSIUM IODIDE (KI); Potide
Code No	No Data Available
Uses	No Data Available
Chemical Family	No Data Available
Chemical Formula	KI
Chemical Name	Potassium Iodide
Product Description	No Data Available
Company	Arman sina.co
Contact Information	info@armansina.com www.armansina.com

2. HAZARD IDENTIFICATION

Hazard Categories	Health Hazards
Risk Phrases	May cause sensitisation by skin contact.
Safety Phrases	Avoid contact with skin and eyes. Take off immediately all contaminated clothing. Avoid exposure - obtain special instructions before use.

Symbol

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Potassium Iodide	KI	7681-11-0	100.0 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	**Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately**
Eye	**Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately**
Skin	**Wipe off excess material from skin then immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.**
Inhaled	**Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.**
Advice to Doctor	**Avoid contact with this product while helping the victim; keep the victim warmed. Symptomatic treatment should include, above all, measured of support as correction of hydro electrolytic and metabolic disturbances and respiratory failure.**
Medical Conditions Aggravated by Exposure	**No information available on medical conditions aggravated by exposure to this product. Most important symptoms and effects, both acute and delayed: After inhalation, the victim may present cough and shortness of breath. On ingestion, abdominal pain, nausea and vomiting. Contact with the eyes and skin, may cause, redness and pain. In case of skin allergy, redness, itching and rash may occur.**

5. FIRE FIGHTING MEASURES

General Measures	**Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas. Eliminate ignition sources. Move fire exposed containers from fire area if it can be done without risk.**
Flammability Conditions	**Product is not combustible**
Extinguishing Media	**Product is not combustible, compatible with all extinguishing media, such as dry chemical, water spray, carbon dioxide, etc.**
Fire and Explosion Hazard	**Product is a non-flammable solid.**
Hazardous Products of Combustion	**May produce toxic fumes as iodides in a fire.**
Special Fire Fighting Instructions	**Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment.**
Personal Protective Equipment	**Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).**
Flash Point	**No Data Available**
Lower Explosion Limit	**No Data Available**
Upper Explosion Limit	**No Data Available**
Auto Ignition Temperature	**No Data Available**
Hazchem Code	**No Data Available**

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	**Apply ventilation or exhaust system. Moisten area to prevent dusting. Do not touch damage containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation and contact with skin and eyes. Use proper personal protective equipment as indicated in Section 8.**
Clean Up Procedures	**Use a vacuum cleaner to collect residue or another method that does not generate dust. Place the material into appropriate containers and remove to a safe place. Dispose in accordance with local regulation about residues.**
Containment	**Stop leak if safe to do so. Isolate the danger area.**
Decontamination	**Clean the area.**
Environmental Precautionary Measures	**Prevent from entering into soil, waterways and groundwater.**
Evacuation Criteria	**Evacuate all unnecessary personnel.**

7. HANDLING AND STORAGE

Handling	Handle in a well-ventilated area or with adequate general/local ventilation system. Use personal protective equipment as indicated on Section 8. Avoid inhaling product dust. Wash hands before eating and do not eat, drink, or smoke in workplace. Contaminated clothing shall be changed before reuse.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Avoid heat. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Store in original packaging as approved by manufacturer. Use plastic bag for packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m3 (for inspirable dust) and 3mg/m3 (for respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.
Engineering Measures	Provide general ventilation combined with local exhaust ventilation, in case of generation of mist product. Safety shower and eye bath available near work site. Engineering controls measures are the most effective way of reducing product exposure.
Personal Protection Equipment	RESPIRATOR: Use respiratory protective equipments against dust. In cases of high potential of exposure use a supplied-air respirator, full facepiece, operated in positive-pressure mode. Respirator can be used in combination with a self-contained breathing apparatus (SCBA), full facepiece, operated in positive-pressure mode, should be used too. (AS1715/1716). EYES: Use chemical safety goggles and/or a full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area. (AS1336/1337). HANDS: Wear protective gloves (AS2161). CLOTHING: Wear clean body-covering clothing and safety footwear (AS3765/2210).
Work Hygienic Practices	No Data Available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystals
Odour	Odourless
Colour	White
pH	7.0 - 9.0 50g/L Water Solution
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	1330ºC
Melting Point	686ºC
Freezing Point	No Data Available
Solubility	Soluble in water and ethanol
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available

Decomposition Temperature	**No Data Available**
Density	**3.1 Relative Density**
Specific Heat	**No Data Available**
Molecular Weight	**No Data Available**
Net Propellant Weight	**No Data Available**
Octanol Water Coefficient	**No Data Available**
Particle Size	**No Data Available**
Partition Coefficient	**n-octanol/water: 0.04**
Saturated Vapour Concentration	**No Data Available**
Vapour Temperature	**No Data Available**
Viscosity	**No Data Available**
Volatile Percent	**0% @ 21 deg C**
VOC Volume	**No Data Available**
Additional Characteristics	**No Data Available**
Potential for Dust Explosion	**No Data Available**
Fast or Intensely Burning Characteristics	**No Data Available**
Flame Propagation or Burning Rate of Solid Materials	**No Data Available**
Non-Flammables That Could Contribute Unusual Hazards to a Fire	**No Data Available**
Properties That May Initiate or Contribute to Fire Intensity	**No Data Available**
Reactions That Release Gases or Vapours	**No Data Available**
Release of Invisible Flammable Vapours and Gases	**No Data Available**

10. STABILITY AND REACTIVITY

Chemical Stability	**Stable under ordinary conditions of use and storage. On long exposure to air becomes yellow due to release of iodine.**
Conditions to Avoid	**Air, moisture, light and incompatibles.**
Materials to Avoid	**Alkaline metals, ammoniac, halogen-halogen compounds, hydrogen peroxide, oxidants and fluor.**
Hazardous Decomposition Products	**Toxic fumes (iodides)**
Hazardous Polymerisation	**Does not suffer polymerization.**

11. TOXICOLOGICAL INFORMATION

General Information	**LD50 (oral, rats) = 2779mg/kg.** **Germ cell mutagenicity: There are no relevant data from germ cell mutagenicity.** **Carcinogenicity: It s not classified by IARC.** **Reproductive toxicity: There are no relevant data from reproductive toxicity.** **STOT-single exposure: May cause gastrointestinal disturbances with nausea, vomiting and diarrhea.** **STOT-repeated exposure: May cause iodism (eyelids swelling, sneezing, skin rash and vomiting).** **Aspiration hazard: There is no data from aspiration hazard. Product is solid.**
Ingestion	**May cause gastrointestinal disturbances with nausea, vomiting and diarrhea.**
EyeIrritant	**May cause mechanical eye irritation with redness and pain.**
Inhalation	**There is no data from aspiration hazard. Product is solid.**
SkinIrritant	**May cause mechanical skin irritation with redness and pain. Epidemiological data shows that a small quantity of the product may cause skin sensitization. The symptoms include redness, itching and skin rash.**
Carcinogen Category	**No Data Available**

12. ECOLOGICAL INFORMATION

Ecotoxicity	**There are not known data regarding ecotoxicity.**
Persistence/Degradability	**It is expected low persistence and high degradability.**
Mobility	**Not determinate.**
Environmental Fate	**Avoid contaminating waterways, drains and sewers.**
Bioaccumulation Potential	**Does not have bioaccumulative potential.** **logKow = 0.04**
Environmental Impact	**No Data Available**

13. DISPOSAL CONSIDERATIONS

General Information	**Dispose of in accordance with all local regulations. All empty packaging should be disposed of in accordance with Local Regulations or recycled/reconditioned at an approved facility. Keep the product remains in their original containers and properly sealed. Disposal should be performed as established for the product.** **Contaminated packaging: Do not reuse empty containers. These may contain residues of the product and must be kept closed and sent for destruction in the appropriate place. In some cases the packaging should be returned to the registering company or supplier.**
Special Precautions for Land Fill	**Contact a specialist disposal company or the local waste regulator for advice. The treatment and disposal should be evaluated specifically for each product. Can be deposited in landfills, sent to an appropriate incineration or other means of disposal provided they meet the requirements of local law.**

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name	**POTASSIUM IODIDE**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
	No Data Available
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**

Sea Transport
IMDG

Proper Shipping Name	**POTASSIUM IODIDE**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**
EMS	**No Data Available**
Marine Pollutant	**No**

Air Transport
IATA

Proper Shipping Name	**POTASSIUM IODIDE**
Class	**No Data Available**
Subsidiary Risk(s)	**No Data Available**
UN Number	**No Data Available**
Hazchem	**No Data Available**
Pack Group	**No Data Available**
Special Provision	**No Data Available**

15. OTHER INFORMATION

Revision	**2**
Key/Legend	**< Less Than** **> Greater Than** **atm Atmosphere** **CAS Chemical Abstracts Service (Registry Number)** **cm Square Centimetres** **CO2 Carbon Dioxide** **COD Chemical Oxygen Demand** **Degrees Celcius** **Degrees Farenheit** **g Grams** **g/cm Grams per Cubic Centimetre** **g/l Grams per Litre** **HSNO Hazardous Substance and New Organism** **IDLH Immediately Dangerous to Life and Health** **immiscible Liquids are insoluable in each other.** **inHg Inch of Mercury** **inH2O Inch of Water** **K Kelvin** **kg Kilogram** **kg/m Kilograms per Cubic Metre** **lb Pound** **LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.** **LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.** **ltr or L Litre** **m Cubic Metre** **mbar Millibar** **mg Milligram** **mg/24H Milligrams per 24 Hours** **mg/kg Milligrams per Kilogram** **mg/m Milligrams per Cubic Metre** **Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.** **mm Millimetre** **mmH2O Millimetres of Water** **mPa.s Millipascals per Second** **N/A Not Applicable** **NIOSH National Institute for Occupational Safety and Health** **NOHSC National Occupational Heath and Safety Commission** **OECD Organisation for Economic Co-operation and Development** **Oz Ounce** **PEL Permissible Exposure Limit** **Pa Pascal** **ppb Parts per Billion** **ppm Parts per Million** **ppm/2h Parts per Million per 2 Hours** **ppm/6h Parts per Million per 6 Hours** **psi Pounds per Square Inch** **R Rankine** **RCP Reciprocal Calculation Procedure** **STEL Short Term Exposure Limit** **TLV Threshold Limit Value** **tne Tonne** **TWA Time Weighted Average** **ug/24H Micrograms per 24 Hours** **UN United Nations** **wt Weight**