

## MATERIAL SAFETY DATA SHEET

### 1) CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Common Name/Trade name	POTASSIUM IODIDE GRANULAR
Name of manufacturer/supplier	ESKAY IODINE PVT. LTD. Plot no: 907/2, GIDC Industrial Estate, Jhagadia, Dist: Bharuch Gujarat-393110, INDIA
Contact no:	+91 - 7567039300
Email:	<a href="mailto:sunilgsharda@sk1932.com">sunilgsharda@sk1932.com</a>
Synonym:	Not available
Chemical Name:	Potassium Iodide Granular
Chemical family:	Not available
Chemical Formula:	KI
CAS:	7681-11-0

### 2) COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS	EXPOSURE LIMITS			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
Potassium Iodide Granular	7681-11-0				100

Toxicological Data & ingredients	Potassium Iodide Granular LD50 : Not Available LC50 : Not Available Lowest Published Lethal Dose LDL [Mouse] – Route Oral; Dose : 1862 mg/kg LDL [Rabbit] – Route Oral; Dose :916 mg/kg
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### 3) HAZARDS IDENTIFICATION

Potential Acute Health Effects:	Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation
Potential Chronic Health Effects:	Carcinogenic Effects: Not available Mutagenic Effects: Mutagenic for mammalian somatic cells. Teratogenic Effects: Not available Developmental Toxicity: Classified Reproductive System/toxin/female, Development toxin [POSSIBLE] Repeated or prolonged exposure is not known to aggravate medical condition.

### 4) FIRST AID MEASURES

Eye contact:	Check for and remove any contact lenses. In case of Contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.
Skin Contact:	Wash with soap and water. Cover the irritated skin

Serious skin contact:	With an emollient, <b>Remove contaminated clothing and shoes.</b> Get medical attention if irritation occurs. Cold water may be used. Not available
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial Respiration. If breathing is difficult, give oxygen. Give medical attention.
Serious inhalation:	Not available
Ingestion:	Do not induce vomiting unless directed to do so by medical Personnel. Never give anything by mouth to unconscious person. <b>If victim is conscious and alert, give 2-4 cupful of milk or water.</b> If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing, such as a collar, tie, belt or waistband.
Serious Ingestion:	Not available

#### 5) FIRE AND EXPLOSION DATA AND FIRE FIGHTING MEASURES:

Flammability of the product:	Non flammable
Auto ignition temperature:	Not applicable
Flash points:	Not applicable
Flammable limits:	Not applicable
Products of combustion:	Some hazardous decomposition products are: Hydrogen Iodide, oxides Of Potassium, Iodine.
Fire hazards in place of various substances:	Not applicable
Explosion hazards in place of various substances:	Not available
Risk of explosion of product in presence of mechanical impact:	Not available
Risk of explosion of product in presence of static discharge:	Not available
Fire fighting media & Instruction:	Not applicable
Special remarks on fire hazards:	Not available
Special remarks on explosion hazards:	Potassium Iodide Granular + Fluorine Perchlorate will explode on contact.

#### 6) ACCIDENTAL RELEASE MEASURES:

Small Spill:	Use appropriate tools to put the spilled solid in a convenient waste Disposal container, Finish cleaning by spreading water on the contaminated surface and dispose off according to local and regional authority requirements.
Large Spill:	Use a shovel o put the material into a convenient waste Disposal container, Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**7) HANDLING AND STORAGE:**

Precautions:	Keep locked up. Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep away from incompatibles such as oxidizing agents, reducing agents, metals, acid, moisture.
Storage:	Moisture sensitive, Light sensitive, Air sensitive keep container tightly closed in a light-resistant containers. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F) Humidity below 65%

**8) EXPOSURE CONTROLS/ PERSONAL PROTECTION:**

Engineering Controls:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection :	Safety glasses. Lab coat. Dust Respirator. Be sure to use an approved / certified respirator or equivalent. Gloves.
Personal Protection in case of a Large Spill :	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient, consult a specialist BEFORE handling this product.
Exposure Limits :	Not available.

**9) PHYSICAL AND CHEMICAL PROPERTIES:**

Physical State and Appearance:	Solid ( Deliquescent Crystals Solid )
Molecular Weight:	166 g/mole
pH ( 1 % solution / water ) :	Not Available
Boiling Point:	1330 °C (2426 ° F)
Melting Point:	681 ° C (1257.8 ° F )
Critical Temperature:	Not Available
Specific Gravity:	3.1 (Water = 1 )
Vapor Pressure:	Not Applicable
Vapor Density:	Not Available
Volatility:	Not Available
Odor Threshold:	Not Available
Water / Oil Dist. Coeff. :	Not Available
Ionicity (in water):	Not Available
Dispersion Properties:	See solubility in water, methanol, acetone
Solubility:	Insoluble in cold water, hot water. Soluble in methanol. Partially Soluble in acetone.

**10) STABILITY AND REACTIVITY DATA:**

Stability:	The product is stable.
Instability Temperature:	Not available.
Conditions of Instability:	Light, moisture, incompatible materials. It is stable under ordinary Conditions of use and storage. On long exposure to air, it becomes Yellow due to release of Iodine.
Incompatibility with various substances:	Reactive with oxidizing agents, reducing agents, organic materials, Metals, acids.
Corrosivity:	Corrosive in presence of steel, of aluminum, of zinc. Non corrosive in presence of glass, of copper, of stainless steel (304), of stainless steel (316)
Special Remarks on Reactivity:	Moisture sensitive. Light sensitive. Air sensitive. Air causes decomposition to iodine.  Reacts violently with strong oxidizers, bromotrifluorides, chlorotrifluorides, fluorine perchlorate, metallic salts. Attacks metals in moist environments. Also, incompatible with salts of alkaloids, chloral hydrate, calomel (mercurous chloride), potassium chlorate, tartaric and other acids, oxidants, diazonium salts, charcoal, ozone, strong reducers, alkali metals, metals (brass, aluminum magnesium, zinc, cadmium, copper, tin, nickel, steel), metallic salts, organic materials, light.
Special Remarks on Corrosivity :	Incompatible with water, producing a corrosive. Corrosive in all concentrations to most metals, except stainless steel, titanium and tantalum.
Polymerization :	Will not occur.

**11) TOXICOLOGICAL INFORMATION:**

Routes of Entry :	Inhalation. Ingestion.
Toxicity to Animals :	LD50 : Not Available. LC50 : Not Available.
Chronic effects on Humans :	MUTAGENIC EFFECTS : Mutagenic for mammalian somatic cells. DEVELOPMENTAL TOXICITY : Classified Reproductive system/toxin/female, development toxin [POSSIBLE]. Other Toxic effects on Human : Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.
Special Remarks on Toxicity to animals :	Not available.
Special Remarks on Chronic Effects on Humans:	Can cause adverse reproductive effects and birth defects based on animal data. May affect genetic material based on animal data.
Special Remarks on other Toxic effects on Humans:	Acute Potential Health Effects.



Skin : May cause skin irritation  
Eyes : May cause eye irritation  
Inhalation: May cause respiratory tract irritation  
Ingestion : Causes gastrointestinal tract irritation with nausea, vomiting and diarrhea. May affect behavior (somnolence, muscle weakness)Chronic potential healths effects : Can lead to iodism characterized by salivation, nasal discharge, sneezing, conjunctivitis, fever, headache, laryngitis, bronchitis, stomatits, parotitis, and skin rashes. Chronic ingestion may also affect metabolism, and thyroid gland. Further more, chronic ingestion of iodides (in animals) during pregnancy has resulted in fetal deaths, severe goiter and cretinoid appearance of the newborn.

**12) ECOLOGICAL INFORMATION:**

Ecotoxicity : Not available  
BOD5 and COD : Not available  
Products of Biodegradation : Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.  
Toxicity of the products of Biodegradation : The product itself and its products of degradation are not toxic.  
Special Remarks on the Product : Not available.

**13) DISPOSAL CONSIDERATIONS:**

Water Disposal : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**14) TRANSPORT INFORMATION:**

DOT Classification : Not a DOT controlled material (United States)  
Identification : Not applicable  
Special Provisions for Transport : Not applicable

**15) OTHER REGULATORY INFORMATION:**

Federal and State Regulations : TSCA 8(b) inventory : Potassium Iodide Granular  
Other Regulations : EINECS : This product is on the European Inventory of Existing Commercial Chemical Substances.  
Other Classification : WHMIS (Canada) : Class D-2 : Material causing other toxic effects (VERY TOXIC)  
: DSCL (EEC) : R40 – Possible risks of irreversible effects.  
: R62 – Possible risk of impaired fertility.  
: R63 – Possible risk of harm to the unborn child.  
: S24/25 – Avoid contact with skin and eyes.  
Protective Equipment : Gloves  
: Lab Coat  
: Dust Respirator. Be sure to use an approved / certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate  
: Safety Glasses.

**16) OTHER INFORMATION:**

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the users responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Eskay Iodine Pvt. Ltd. assumes no responsibility for the completeness or accuracy of the information contained herein.

**For ESKAY IODINE PVT. LTD.**



**AUTHORISED SIGNATORY**