E-mail: info@amphray.com

G. AMPHRAY LABORATORIES

Sambava Chambers, 4th Floor, Sir P. M. Road, Mumbai – 400 001, INDIA. Web: www.amphray.com

MATERIAL SAFETY DATA SHEET

1) CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Common Name / Trade Name : POTASSIUM IODIDE

Name of Manufacturer / Supplier : G. AMPHRAY LABORATORIES

4th Floor, Sambava Chambers, Sir. P. M. Road, Fort,

Mumbai - 400 001, India.

Telephone No : 00 91 (22) 4082 8100 / 2266 3150 / 6631 77 50 Fax No : 00 91 (22) 4082 8181 / 2202 4657 / 6631 77 47

Email : <u>info@amphray.com</u>

Commercial Name : Not Available Synonym : Not Available

Chemical Name : Potassium Iodide

Chemical Family : Not Available

Chemical Formula : KI

CAS : 7681-11-0

TSCA : TSCA 8 (b) Inventory : Potassium Iodide

2) COMPOSITION AND INFORMATION ON INGREDIENTS

		EXPOSURE LIMITS			
Name	CAS	TWA (mg/m³)	STEL (mg/m³)	CEIL (MG/M³)	% by Weight
Potassium Iodide	7681-11-0				100

Toxicological Data & Ingredients : Potassium Iodide

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

3) HAZARDS IDENTIFICATION

Potential Acute Health Effects : Hazardous in case of Ingestion. Slightly hazardous in case of skin

contact (irritant), of eye contact (irritant), of inhalation.

E-mail: info@amphray.com

G. AMPHRAY LABORATORIES

Sambava Chambers, 4th Floor, Sir P. M. Road, Mumbai – 400 001, INDIA. Web: www.amphray.com

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 removal any contact lenses. Incase 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.

Wash with soon and water. Cover the irritated skin with an amplier

Skin Contact : Wash with soap and water. Cover the irritated skin with an emollient.

Get medical attention if irritation develops. Cold water may be used.

Serious Skin Contact : Not Available.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial

respiration.

If breathing is difficult, give oxygen. Get 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 an unconscious person. 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 & EXPLOSION DATA

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 presence of Various Substances: Not applicable. Explosion Hazards in Presence of Various Substances: Not Available

Risks of explosion of the product in presence of mechanical impact: Not Available Risks of explosion of the 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 + 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 of according to local and regional

 $authority \ \ requirements.$

E-mail: info@amphray.com

G. AMPHRAY LABORATORIES

Sambava Chambers, 4th Floor, Sir P. M. Road, Mumbai – 400 001, INDIA. Web: www.amphray.com

Large Spill : Use a shovel to 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

 $possible. \ Keep \ away \ from \ incompatibles \ such \ as \ oxidizing \ agents,$

Storage : Moisture Sensitive. Light Sensitive keep container

tightly closed in 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.

reducing agents, metals, acids, moisture.

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.

166 g/mole

Suggested protective clothing might not be sufficient, consult a

specialist BEFORE handling this product.

Exposure Limits : Not available.

9) PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight

Physical State and Appearance : Solid (Deliquescent Crystals Solid)

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.

E-mail: info@amphray.com

G. AMPHRAY LABORATORIES

Sambava Chambers, 4th Floor, Sir P. M. Road, Mumbai – 400 001, INDIA. Web: www.amphray.com

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 aluminium, 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, aluminium 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.

Polymerisation : 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.

 $\label{lem:decomposition} DEVELOPMENTAL\ TOXICITY:\ Classified\ Reproductive\ system/toxin/female,\ development\ toxin\ [POSSIBLE].$

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.

E-mail: info@amphray.com

Web: www.amphray.com

G. AMPHRAY LABORATORIES

Sambava Chambers, 4th Floor, Sir P. M. Road, Mumbai – 400 001, INDIA.

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 applicableSpecial Provisions for Transport:Not applicable

15) OTHER REGULATORY INFORMATION

Federal and State Regulations : TSCA 8(b) inventory : Potassium Iodide

California Proposition 65 Warnings :

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)

E-mail: info@amphray.com

G. AMPHRAY LABORATORIES

Sambava Chambers, 4th Floor, Sir P. M. Road, Mumbai – 400 001, INDIA. Web: www.amphray.com

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, G. Amphray Laboratories assumes no responsibility for the completeness or accuracy of the information contained herein.

Certified True Copy For G. AMPHRAY LABORATORIES

AUTHORISED SIGNATORY