TM MEDIA

MATERIAL SAFETY DATA SHEET



Corp. Office: A-2/3,303-305 Lusa Tower, Azadpur, Comm. Complex, Delhi, India. Customer Care Cell: 91-11-27674615, customercare@titanbiotechltd.com

IODINE (Resublimed), EXTRA PURE

Section 1: Chemical Product Identification

Product Name: IODINE (Resublimed), Extra Pure.

Product Code: 347. CAS#: 7553-56-2. Synonym: Iodine. Chemical Name: Iodine. Chemical Formula: I₂. Formula Weight: 253.81.

Section 2: Composition and Information on Ingredients

Composition:

Name: Iodine.

Toxicological Data on Ingredients:

Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Skin irritation (Category 2), H315 Eye irritation (Category 2), H319 Respiratory system, H335 STOT - RE, Oral (Category 1), Thyroid, H372 Acute aquatic toxicity (Category 1), H400

Section 3: Hazards Identification

Potential Acute Health Effects: Corrosive to skin, eyes, and respiratory system. Liquid or spray mist may produce tissue damage, particularly in mucous membranes of the eyes, mouth and respiratory tract.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. Repeated exposure to this product may result in damage to the vascular system

Section 4: First Aid Measures

Eye Contact: Flush eyes with water as a precaution. **Skin Contact:** Wash off with soap and plenty of water.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

Serious Inhalation: Not Available.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Serious Ingestion: Not available.

TM MEDIA

MATERIAL SAFETY DATA SHEET

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not Available.

Flash Points: Not Available.

Flammable Limits: Not Available.

Products of Combustion: Hydrogen iodide.

Fire Hazards in Presence of Various Substances: No specific information is available regarding the flammability of this

compound in the presence of various materials.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames

and sparks.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

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

Special Remarks on Fire Hazards: Not Available. Special Remarks on Explosion Hazards: Not Available.

Section 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.

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 evacuating through the sanitary system.

Section 7: Handling and Storage

Precautions: Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust.

Storage: Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 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: Splash goggles. 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.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid, crystal.

Odor: Pungent.
Taste: Not Available.
Molecular Weight: 253.81.
Color: Bluish black.

pH: Not available.

Boiling Point: Not Available.

TM MEDIA

MATERIAL SAFETY DATA SHEET

Melting Point: Not Available.

Critical Temperature: Not Available.
Specific Gravity: Not Available.
Vapor Pressure: Not available.
Vapor Density: Not Available.
Volatility: Not available.

Odor Threshold: Not available. Water/Oil Dist. Coeff.: Not available. Ionicity (in Water): Not available. Dispersion Properties: Not available

Solubility: Soluble in aqueous solution of KI, HI.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Avoid excessive heat and light.

Incompatibility with various substances: Strong oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Not Available.

Special Remarks on Corrosivity: Not Available.

Polymerization: Not Available.

Section 11: Toxicological Information

Routes of Entry: Ingestion, Inhalation.

Toxicity to Animals:

LD₅₀: Oral - Rat - 14,000 mg/kg.

LC₅₀: Inhalation - Rat - 4 h - > 4,588 mg/l. Chronic Effects on Humans: Not Available.

Other Toxic Effects on Humans: 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: Not Available.
Special Remarks on other Toxic Effects on Humans: Not Available.

Section 12: Ecological Information

Ecotoxicity: Not available. **BOD 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: Not Available.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

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

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).



MATERIAL SAFETY DATA SHEET

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations: TSCA 8(b) inventory: Iodine.

Other Regulations: Not available.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (**EEC**): Not Applicable.

This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.): Health Hazard: 1 Fire Hazard: 1 Reactivity: 1

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 1

Flammability: 1 Reactivity: 1 Specific hazard: Protective Equipment:

Gloves, Lab coat, Safety glasses, Dust respirator - be sure to use an approved/certified respirator or equivalent.

Section 16: Other Information

References: Full text of H AND R-Statements.

H332 - Acute toxicity, Inhalation (Category 4),

H312 - Acute toxicity, Dermal (Category 4),

H315 - Skin irritation (Category 2),

H319 - Eye irritation (Category 2),

STOT – SE - Specific target organ toxicity - single exposure (Category 3),

STOT - RE - Specific target organ toxicity - repeated exposure, Oral (Category 1), Thyroid, H372

H335 - Respiratory system,

H400 - Acute aquatic toxicity (Category 1).

Other Special Considerations: Not available.

Disclaimer:

TITAN BIOTECH LTD. PROVIDES THE INFORMATION CONTAINED HEREIN IN GOOD FAITH BUT MAKES NO REPRESENTATION AS TO ITS COMPREHENSIVENESS OR ACCURACY. THIS DOCUMENT IS INTENDED ONLY AS A GUIDE TO THE APPROPRIATE PRECAUTIONARY HANDLING OF THE MATERIAL BY A PROPERLY TRAINED PERSON USING THIS PRODUCT. INDIVIDUALS RECEIVING THE INFORMATION MUST EXERCISE THEIR INDEPENDENT JUDGMENT IN DETERMINING ITS APPROPRIATENESS FOR A PARTICULAR PURPOSE. TITAN BIOTECH LTD. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, TITAN BIOTECH LTD WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.