

# SAFETY DATA SHEET

IODOSAN NO. 485  
Product ID: FP0485  
Revised: 06-06-2023  
Replaces: 08-31-2022

## 1. IDENTIFICATION

Product Identifier Used IODOSAN NO. 485  
on the Label:

Other Identifiers: R03691

Product ID: 7553-56-2

Recommended Use: EPA Registered Antimicrobial; EPA Reg. No. 4959-18-2686.

Restrictions on Use: No data available.

Hydrite Chemical Co.  
17385 Golf Parkway  
Brookfield, WI 53045  
(262) 792-1450

### EMERGENCY RESPONSE NUMBERS:

24 Hour Emergency #: (414) 277-1311

CHEMTREC Emergency #: (800) 424-9300

## 2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Substance or mixture corrosive to metals Category 1  
Skin Corrosion/Irritation Category 1C  
Serious Eye Damage/Eye Irritation Category 1

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Danger

Hazard Statements: May be corrosive to metals.  
Causes severe skin burns and eye damage.

Precautionary Statements:

Prevention: Keep only in original container.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
Specific treatment (see First Aid on SDS or on this label).  
Wash contaminated clothing before reuse.  
Absorb spillage to prevent material damage.

IODOSAN NO. 485  
Product ID: FP0485

**Storage:** Store in a secure manner.  
Store in corrosive resistant container with a resistant inner liner.

**Disposal:** Dispose of in accordance with local, regional and international regulations.

**Hazards not otherwise classified:** None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substances/Mixtures:**

<u>Chemical or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Iodine	7553-56-2	~ 1.6 %
Hydriodic Acid	10034-85-2	< 1 %

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

### 4. FIRST-AID MEASURES

**Description of Necessary Measures:**

**Eye Contact:** If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lenses after the first 5 minutes and continue flushing.

**Skin Contact:** If on skin: Flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention.

**Inhalation:** If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

**Ingestion:** If swallowed: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Have person sip a glass of water if able to swallow.

**Most Important Symptoms/Effects, Acute and Delayed:**

**Eye Contact:** Causes severe irritation. May cause: burning. stinging. redness.

**Skin Contact:** May cause mild to moderate irritation. Prolonged contact may cause: itching. redness.

**Skin Absorption:** No data available.

**Inhalation:** May cause mild irritation. Causes irritation of the: nose. throat. respiratory tract. Vapors or mists may cause: coughing. sneezing.

**Ingestion:** May cause moderate irritation. May be harmful if swallowed. May cause: diarrhea. vomiting.

**Indication of Immediate Medical Attention and Special Treatment Needed:** There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Not flammable. Carbon dioxide. Water.

**Specific Hazards Arising from the Chemical:**

**Fire and Explosion Hazards:** None known.

**Hazardous Combustion Products:** Iodine vapors/fumes.

IODOSAN NO. 485  
Product ID: FP0485

**Special Protective Equipment and Precautions for Fire-Fighters:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-Approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment, Emergency Procedures:** Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

**Methods and Materials for Containment and Clean Up:** Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Do not contaminate water, food or feed.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Avoid contamination of food or feed. Store at room temperature. Do not reuse container.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**OSHA Exposure Guidelines:**

<u>Component</u>	<u>Limits</u>
Iodine	0.1 ppm Ceiling; 1 mg/m <sup>3</sup> Ceiling

**ACGIH Exposure Guidelines:**

<u>Component</u>	<u>Limits</u>
Iodine	0.01 ppm TWA (inhalable fraction and vapor); 0.1 ppm STEL (vapor fraction)
Hydriodic Acid	0.01 ppm TWA (inhalable fraction and vapor)

**Appropriate Engineering Controls:** General room ventilation is required. To keep exposures to a minimum, local exhaust may be necessary. Maintain adequate ventilation. Avoid creating dust or mist. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

**Individual Protection Measures:**

**Eye/Face Protection:** Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant.

**Respiratory Protection:** Respiratory protection may be required to avoid overexposure when handling this product. If mists are present, wear: NIOSH-Approved respirator for mists. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Rubber boots.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**IODOSAN NO. 485**  
**Product ID: FP0485**

**Physical State:** Liquid.  
**Color:** Dark brown.  
**Odor:** Iodine odor.  
**Odor Threshold:** N.D.  
**pH:** 1 (as is)  
**Freezing Point (deg. F):** N.D.  
**Melting Point (deg. F):** N.D.  
**Initial Boiling Point or Boiling Range:** N.D.  
**Flash Point:** N.A.  
**Flash Point Method:** N.A.  
**Evaporation Rate (nBuAc = 1):** N.D.  
**Flammability (solid, gas):** N.D.  
**Lower Explosion Limit:** N.A.  
**Upper Explosion Limit:** N.A.  
**Vapor Pressure (mm Hg):** N.D.  
**Vapor Density (air=1):** N.D.  
**Specific Gravity or Relative Density:** 1.03 @ 25 Deg. C  
**Solubility in Water:** Appreciable  
**Partition Coefficient (n-octanol/water):** N.D.  
**Auto-ignition Temperature:** No Data  
**Decomposition Temperature:** N.D.  
**Viscosity:** N.D.  
**% Volatile (wt%):** N.D.  
**VOC (wt%):** N.D.  
**VOC (lbs/gal):** N.D.  
**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions. May emit toxic fumes of iodine with high heat. Will emit chlorine gas if mixed with chlorinated products. Reacts with ammonium hydroxide to form shock-sensitive iodides on drying.

**Conditions to Avoid (e.g., static discharge, shock, or vibration):** Avoid excessive heat.

**Incompatible Materials:** Strong oxidizing agents. Reducing agents. Alkalies. Chlorinated compounds. Ammonia. Alkali metals. Acetaldehyde. Acetylene.

**Hazardous Decomposition Products:** Chlorine containing gases. Toxic vapors/fumes of iodine.

## 11. TOXICOLOGICAL INFORMATION

**Routes of Exposure:** Eyes. Ingestion. Inhalation. Skin.

**Symptoms/Effects: Acute, Delayed and Chronic:**

**Eye Contact:** Causes severe irritation. May cause: burning. stinging. redness.

**Skin Contact:** May cause mild to moderate irritation. Prolonged contact may cause: itching. redness.

**Skin Absorption:** No data available.

**Inhalation:** May cause mild irritation. Causes irritation of the: nose. throat. respiratory tract. Vapors or mists may cause: coughing. sneezing.

**Ingestion:** May cause moderate irritation. May be harmful if swallowed. May cause: diarrhea. vomiting.

**Numerical Measures of Toxicity:**

IODOSAN NO. 485  
Product ID: FP0485

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Iodine	Rat: 14 g/kg	Rabbit: 1425 mg/kg Rabbit: > 2000 mg/kg	4H Rat: > 4.6 mg/L

**Cancer Information:**

This product contains 0.1% or more of the following chemicals listed by NTP, IARC or OSHA as known or possible carcinogens:

Acid mists, strong inorganic

**Medical Conditions Aggravated by Exposure to Product:** Eye disorders. Kidney disorders. Respiratory system disorders. Skin disorders. Thyroid disorders.

**Other:** Chronic exposure to iodine may cause insomnia, conjunctivitis, inflammation of the nasal mucous, bronchitis, tremor, rapid heart beat, diarrhea, and weight loss. Allergic sensitization may occur. Chronic iodine overdoses have produced iodism. Headaches, fever, sneezing, salivation, and skin rashes may occur. Probable lethal does is 2-4 grams of free iodine.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicological Information:** No data available.

**Chemical Fate Information:** No data available.

**13. DISPOSAL CONSIDERATIONS**

**Hazardous Waste Number:** N.A.

**Disposal Method:** Dispose of in accordance with all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. Rinse containers before disposal.

**14. TRANSPORTATION INFORMATION**

**DOT (Department of Transportation):**

**Identification Number:** UN3264  
**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS IODINE)  
**Hazard class:** 8  
**Packing Group:** III  
**Label Required:** CORROSIVE

**15. REGULATORY INFORMATION**

**TSCA Inventory Status:** This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

**SARA Title III Section 311/312 Category Hazards:** Please see Section 2 of this SDS.

<u>Regulated Components:</u>	<u>CAS</u>	<u>CERCLA</u>	<u>SARA</u>	<u>SARA</u>	<u>U.S.</u>	<u>WI</u>	<u>Prop</u>
<u>Component</u>	<u>Number</u>	<u>RQ</u>	<u>EHS</u>	<u>313</u>	<u>HAP</u>	<u>HAP</u>	<u>65</u>
Iodine	7553-56-2	No	No	No	No	Yes	No

**\*Prop 65 - May Contain the Following Trace Components:**

No data available.

**FIFRA Information:**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

Hazards to Humans and Domestic Animals

**IODOSAN NO. 485**  
**Product ID: FP0485**

CAUTION: Avoid contact with food. Causes moderate eye injury. Avoid contact with eyes skin or clothing. Wash thoroughly with soap and water after handling.

**ENVIRONMENTAL HAZARDS:**

This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other water unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**16. OTHER INFORMATION**

**Hazard Rating System**

Health: 1  
Flammability: 0  
Reactivity: 0

\* = Chronic Health Hazard

**NFPA Rating System**

Health: 1  
Flammability: 0  
Reactivity: 0  
Special Hazard: None

**SDS Abbreviations**

N.A. = Not Applicable  
N.D. = Not Determined  
HAP = Hazardous Air Pollutant  
VOC = Volatile Organic Compound  
C = Ceiling Limit  
N.E./Not Estab. = Not Established

**SDS Prepared by:** EP

**Reason for Revision:** Change(s) made in Section 1.

**Revised:** 06-06-2023

**Replaces:** 08-31-2022

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.