

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (3N) 99.9% Iodic Acid

**Product Code:** I-H-03

**CAS Number:** 7782-68-5

**Relevant identified uses of the substance:** Scientific research and development

Supplier details:

American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351  
Emergency telephone number:  
+1 800-424-9300

## SECTION 2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Oxidizing solids Category 2

Skin Corrosion/Irritation Category 1 A

Serious Eye Damage/Eye Irritation Category 1

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

Label Elements

Signal Word

Danger

Hazard Statements

May intensify fire; oxidizer

Causes severe skin burns and eye damage

May cause respiratory irritation



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep/Store away from clothing/ other combustible materials  
Take any precaution to avoid mixing with combustibles  
Response  
Immediately call a POISON CENTER or doctor/physician  
Inhalation  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Skin  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
Wash contaminated clothing before reuse  
Eyes  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
Ingestion  
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting  
Fire  
In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction  
Storage  
Store locked up  
Store in a well-ventilated place. Keep container tightly closed  
Disposal  
Dispose of contents/container to an approved waste disposal plant  
Hazards not otherwise classified (HNOC)  
None identified

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### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component - Iodic acid (HIO<sub>3</sub>)  
CAS-No.: 7782-68-5  
Weight %: >95

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### **SECTION 4. FIRST AID MEASURES**

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.  
Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required. Keep eye wide open while rinsing.  
Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately.  
Inhalation Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.  
Ingestion  
Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water.  
Never give anything by mouth to an unconscious person.  
Most important symptoms and effects

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation  
Notes to Physician Treat symptomatically

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## **SECTION 5. FIREFIGHTING MEASURES**

Suitable Extinguishing Media CO 2, dry chemical, dry sand, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available

Flash Point No information available

Method - No information available

Autoignition Temperature

Explosion Limits

Upper No data available

Lower No data available

Oxidizing Properties Oxidizer

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.).

Hazardous Combustion Products

Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA

Health

3

Flammability

3

Instability

3

Physical hazards

OX

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## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal Precautions Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.

Environmental Precautions Should not be released into the environment. Do not allow material to contaminate ground water system.

Methods for Containment and Clean

Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Sweep up

and shovel into suitable containers for disposal.

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## **SECTION 7. HANDLING AND STORAGE**

**Handling** Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from clothing and other combustible materials.

**Storage** Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials.

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## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

combustible materials.

**Storage** Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials.

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations

and safety showers are close to the workstation location.

**Personal Protective Equipment**

**Eye/face Protection** Tight sealing safety goggles. Face protection shield.

**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline

respirator in the positive pressure mode with emergency escape provisions.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice

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## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State** Powder Solid

**Appearance** Beige

**Odor** Odorless

**Odor Threshold** No information available

**pH** 2.0 Acidic

**Melting Point/Range** 110 °C / 230 °F

**Boiling Point/Range** No information available

**Flash Point** No information available

**Evaporation Rate** Not applicable

**Flammability (solid,gas)** No information available

**Flammability or explosive limits**

**Upper** No data available

**Lower** No data available

**Vapor Pressure** negligible

**Vapor Density** Not applicable

**Specific Gravity** No information available

**Solubility** Soluble in water

**Partition coefficient; n-octanol/water** No data available

**Autoignition Temperature**

**Decomposition Temperature** No information available

**Viscosity** Not applicable

Molecular Formula H I O<sub>3</sub>  
Molecular Weight 175.91

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## SECTION 10. STABILITY AND REACTIVITY

Reactive Hazard Yes

Stability Stable under normal conditions. Oxidizer: Contact with combustible/organic material may cause fire. Sensitivity to light.

Conditions to Avoid Incompatible products. Excess heat. Combustible material. Exposure to light.

Incompatible Materials Organic materials, Alcohols, Reducing Agent, Strong reducing agents, Combustible material

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

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## SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information

Toxicologically Synergistic

Products

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects, both acute and delayed

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

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## SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains.

Persistence and Degradability Soluble in water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

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## **SECTION 13. DISPOSAL CONSIDERATIONS**

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

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## **SECTION 14. TRANSPORT INFORMATION**

DOT

UN-No UN3085

Proper Shipping Name Oxidizing solid, corrosive, n.o.s.

Technical Name (IODIC ACID)

Hazard Class 5.1

Subsidiary Hazard Class 8

Packing Group II

TDG

UN-No UN3085

Proper Shipping Name Oxidizing solid, corrosive, n.o.s.

Hazard Class 5.1

Subsidiary Hazard Class 8

Packing Group II

IATA

UN-No UN3085

Proper Shipping Name Oxidizing solid, corrosive, n.o.s.

Hazard Class 5.1

Subsidiary Hazard Class 8

Packing Group II

IMDG/IMO

UN-No UN3085

Proper Shipping Name Oxidizing solid, corrosive, n.o.s.

Hazard Class 5.1

Subsidiary Hazard Class 8

Packing Group II

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## **SECTION 15. REGULATORY INFORMATION**

U.S. Federal Regulations

SARA 313 Not applicable

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations  
Not applicable  
U.S. Department of Transportation  
Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N  
U.S. Department of Homeland  
Security  
This product does not contain any DHS chemicals.  
Other International Regulations  
Mexico - Grade No information available

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## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.