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SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION 58159

Product Name: HYDRIODIC ACID 47%, ACS, STAB.
Chemical Formula: HI
Manufacturer MSDS.: 58159
Manufacturer Name: Sigma-Aldrich Brand: FLUKA
Address: 3050 Spruce Street
 SAINT LOUIS MO 63103 US
Business Phone: 800-325-5832
Business Fax: 800-325-5052
Emergency Phone: 314-776-6555
Revision Date: 01/28/2006
Comments: Version: 1.6
 *additional chronic hazards present.
Product Codes: 58159

NFPA

0
3 0

HMIS

HEALTH	3
FIRE	0
REACTIVITY	0
PPE	

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SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS 58159

Ingredient Name	CAS#	Ingredient Percent
HYDRIODIC ACID SOLUTION IN WATER, STABILIZED (47%) SARA Section 313: No	None	
HYDRIODIC ACID...%	10034-85-2	47 by Weight
WATER SARA Section 313: No	7732-18-5	51.5 by Weight
Stabilized with:	None	
HYPOPHOSPHOROUS ACID	6303-21-5	1.5 by Weight

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SECTION 3 : HAZARDS IDENTIFICATION 58159

Emergency Overview: Corrosive. Causes burns.
Target Organs: Thyroid. Kidneys.
Comments: For additional information on toxicity, please refer to Section 11.

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SECTION 4 : FIRST AID MEASURES 58159

Eye Contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.


Skin Contact:	In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.
Inhalation:	If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Ingestion:	If swallowed, wash out mouth with water provided person is conscious. Call a physician. Do not induce vomiting.

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SECTION 5 : FIRE FIGHTING MEASURES

58159


Flash Point:	N/A
Auto Ignition Temperature:	N/A
Flammability Class:	N/A
Extinguishing Media:	Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.
Fire Fighting Instructions:	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions. Contact with other material may cause fire. May accelerate combustion.

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SECTION 6 : ACCIDENTAL RELEASE MEASURES

58159

Leak Response:	Evacuate area.
Personal Precautions:	Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.
Spill Cleanup Measures:	Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

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SECTION 7 : HANDLING and STORAGE

58159

Handling:	User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.
Storage:	Suitable: Keep tightly closed. Keep away from combustible materials, heat, sparks, and open flame.
Hygiene Practices:	Remove and wash contaminated clothing promptly. Wash thoroughly after handling. Discard contaminated shoes.
Special Handling Procedures:	Air and light sensitive.

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SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION

58159

Engineering Controls:	Safety shower and eye bath. Use only in a chemical fume hood.
Hand Protection Description:	Compatible chemical-resistant gloves.
Eye/Face Protection:	Chemical safety goggles.
Respiratory Protection:	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.
Other Protective:	Faceshield (8-inch minimum).

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SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

58159

Color:	Light yellow-green
Physical State:	Clear liquid
pH:	N/A
Decomposition Temperature:	N/A
Vapor Pressure:	N/A
Vapor Density:	N/A

Boiling Point:	N/A
Freezing Point:	- 50.0 deg C
Melting Point:	N/A
Solubility:	N/A
Specific Gravity:	1.5 g/cm3
Density:	N/A (Bulk)
Evaporation Point:	N/A
Saturated Vapor Concentration:	N/A
Percent Volatile:	N/A
Volatile Organic Compound Content:	N/A
Viscosity:	N/A
Odor Threshold:	N/A
Coefficient of Water/Oil Distribution:	N/A
Other:	Flash Point: N/A; Explosion Limits: N/A; Flammability: N/A; Autoignition Temp: N/A;
Comment:	Water Content: N/A; Solvent Content: N/A; Surface Tension: N/A; Refractive Index: N/A; Optical Rotation: N/A; Miscellaneous Data: N/A; N/A = not available

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SECTION 10 : STABILITY and REACTIVITY

58159

Chemical Stability:	Stable.
Conditions to Avoid:	Exposure to air may affect product quality. Exposure to light may affect product quality.
Incompatibilities with Other Materials:	Reducing agents, Alcohols, Organic materials, Magnesium, Potassium, Perchloric acid.
Hazardous Polymerization:	Will not occur
Hazardous Decomposition Products:	Hydrogen iodide, Phosphorous acid.
Conditions of Instability	May discolor on exposure to light.

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SECTION 11 : TOXICOLOGICAL INFORMATION

58159

Applies to All Ingredients :

Target Organ Data:	Kidneys. Thyroid.
Eye Effect:	Causes burns.
Skin Effects:	Causes burns.
Ingestion Effects:	May be harmful if swallowed.
Inhalation Effects:	Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. May be harmful if inhaled.
Teratogenicity:	Result: Exposure to excessive amounts of iodine during pregnancy is capable of producing fetal hypothyroidism. Iodine-containing drugs have been associated with fetal goiter.
Reproductive Toxicity:	Result: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.
Notes:	May be harmful if absorbed through the skin.
Notes Caption:	Skin Absorption
Other Toxicological Information:	SIGNS AND SYMPTOMS OF EXPOSURE: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include: skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.;

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SECTION 12 : ECOLOGICAL INFORMATION

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Ecological Paragraph: No data available.

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SECTION 13 : DISPOSAL CONSIDERATIONS

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Waste Disposal: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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SECTION 14 : TRANSPORT INFORMATION

58159

DOT Shipping Information: Hazard Label: Corrosive; PIH: Not PIH;
DOT Shipping Name: Hydriodic acid
DOT UN Number: 1787
DOT Hazard Class: 8
DOT Packing Group: Packing Group II
IATA Shipping Name: Hydriodic acid
IATA Hazard Class: 8
IATA UN Number: 1787
IATA Packing Group: II

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SECTION 15 : REGULATORY INFORMATION

58159

Applies to all ingredients:

SARA: SARA LISTED: No;
US Federal: Indication of Danger: Corrosive.; Risk Statements: Causes burns.; Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).; US Statements: Target organ(s): Thyroid. Kidneys.;
Canada WHMIS: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
Canada DSL: Yes
Canada NDSL: No
Risk Phrases: R: 34; Causes burns.;
Safety Phrase: S: 26-36/37/39-45; In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).;
Regulatory Notes EU Classification: Symbol of Danger: C; Indication of Danger: Corrosive.;

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SECTION 16 : ADDITIONAL INFORMATION

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Disclaimer:

For R&D use only. Not for drug, household or other uses. 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. Sigma-Aldrich Inc., 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.

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