

## MATERIAL SAFETY DATA SHEET

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Version 1.4

## Section 1 - Product and Company Information

Product Name MERCUROUS IODIDE YELLOW  
Product Number 83375  
Brand FLUKA

Company Sigma-Aldrich Canada, Ltd  
Address 2149 Winston Park Drive  
Oakville ON L6H 6J8 CA

Technical Phone: 9058299500  
Fax: 9058299292  
Emergency Phone: 800-424-9300

## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
MERCUROUS IODIDE YELLOW	15385-57-6	Yes
Formula	Hg2I2	

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Highly Toxic (USA) Toxic (EU).

Toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Irritating to eyes, respiratory system and skin.

Readily absorbed through skin. Neurological hazard. Target organ(s): Kidneys. G.I. System.

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

## ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

## INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

## Section 5 - Fire Fighting Measures

## FLASH POINT

N/A

## AUTOIGNITION TEMP

N/A

## FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Noncombustible. Use extinguishing media appropriate to surrounding fire conditions.

FIREFIGHTING

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.

EXPOSURE HAZARD(S)

Material: Irritant.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid all contact.

STORAGE

Suitable: Keep tightly closed. Store in a cool dry place.

SPECIAL REQUIREMENTS

Light sensitive.

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

PERSONAL PROTECTIVE EQUIPMENT

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance	Color: Deep yellow	
	Form: Powder	
Property	Value	At Temperature or Pressure
Molecular Weight	654.99 AMU	

pH	N/A
BP/BP Range	N/A
MP/MP Range	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	7.7 g/cm <sup>3</sup>
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Surface Tension	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point	N/A
Explosion Limits	N/A
Flammability	N/A
Autoignition Temp	N/A
Refractive Index	N/A
Optical Rotation	N/A
Miscellaneous Data	N/A
Solubility	N/A

N/A = not available

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## Section 10 - Stability and Reactivity

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### STABILITY

Conditions of Instability: May discolor on exposure to light.  
 Materials to Avoid: Acids, Strong oxidizing agents.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Mercury/mercury oxides., Iodine,  
 Hydrogen iodide

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## Section 11 - Toxicological Information

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### ROUTE OF EXPOSURE

Inhalation: Material is irritating to mucous membranes and upper  
 respiratory tract.

Multiple Routes: Causes eye and skin irritation. May be fatal if  
 inhaled, swallowed, or absorbed through skin.

### TARGET ORGAN(S) OR SYSTEM(S)

Nerves. G.I. System. Kidneys.

### SIGNS AND SYMPTOMS OF EXPOSURE

Nausea, vomiting, diarrhea. Exposure to mercury compounds can  
 cause tremors, loss of appetite, weight loss, anuria, and  
 uremia. 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. Dizziness. Neurotoxic effects. Prolonged exposure can cause:

CONDITIONS AGGRAVATED BY EXPOSURE

May cause nervous system disturbances.

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Section 12 - Ecological Information

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No data available.

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Section 13 - Disposal Considerations

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APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Catalysts and expensive metals should be recovered for reuse or recycling. Observe all federal, state, and local environmental regulations.

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Section 14 - Transport Information

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DOT

Proper Shipping Name: Mercury iodide, [solution]  
UN#: 1638  
Class: 6.1  
Packing Group: Packing Group II  
Hazard Label: Toxic substances.  
PIH: Not PIH

IATA

Proper Shipping Name: MERCURY IODIDE, SOLID  
IATA UN Number: 1638  
Hazard Class: 6.1  
Packing Group: II

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Section 15 - Regulatory Information

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EU ADDITIONAL CLASSIFICATION

Symbol of Danger: T+-N  
Indication of Danger: Very toxic. Dangerous for the environment.  
R: 26/27/28-33-50/53  
Risk Statements: Very toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
S: 13-28-45-60-61  
Safety Statements: Keep away from food, drink, and animal feedingstuffs. After contact with skin, wash immediately with plenty of water. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/safety data sheets.

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Highly Toxic (USA) Toxic (EU).  
Risk Statements: Toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Irritating to eyes, respiratory system and skin.  
Safety Statements: Do not breathe dust. 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: Readily absorbed through skin. Neurological hazard. Target organ(s): Kidneys. G.I. System.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes

NOTES: This product is subject to SARA section 313 reporting requirements. This product is subject to SARA section 313 reporting requirements.

UNITED STATES - STATE REGULATORY INFORMATION

CALIFORNIA PROP - 65

California Prop - 65: This product is or contains chemical(s) known to the state of California to cause developmental toxicity.

CANADA REGULATORY INFORMATION

WHMIS Classification: 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.

DSL: No

NDSL: No

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Section 16 - Other Information

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DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

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. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.