



## Material Safety Data Sheet

**Product Name: Iodoform**

### Section 1-Product Information

**Formula** :  $\text{CHI}_3$   
**Molecular weight** : 393.71  
**CAS No** : 75-47-8  
**Synonym's** : Triiodomethane

### Section 2-Composition, Information on Ingredients

**Ingredient** : Iodoform  
**Hazardous** : Yes  
**CAS No** : 75-47-8  
**Percent** : 99 - 100%  
**Appearance** : Yellow powder or crystals

### Section 3-Hazards Identification

#### Emergency Overview

Warning! Harmful if swallowed, inhaled or absorbed through skin. Causes irritation to skin, eyes and respiratory tract. Affects cardiovascular system, central nervous system, liver and kidneys.

#### SAF-T-DATA Ratings (Provided here for your convenience)

Health Rating: 3 - Severe (Life)

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 3 - Severe

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES

Storage Color Code: Green (General Storage)

#### Potential Health Effects

**Inhalation:** Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. High concentrations can cause pulmonary edema.

**Ingestion:** Causes burns of gastrointestinal tract. May cause vomiting and all degrees of cerebral depression or excitation, including delirium, hallucinations, coma, and death. A rapid pulse with or without a fever is characteristic. High concentrations applied to the skin have caused damage to the heart, liver, and kidneys.

**Skin Contact:** May cause irritation or dermatitis. Can be absorbed through skin and produce systemic effects; symptoms may parallel ingestion.

**Eye Contact:** May cause severe irritation, redness, pain. Visual disturbances or impairment may occur.

**Chronic Exposure:** May cause "Iodism" on prolonged absorption. Symptoms are skin rash, headache and skin eruptions in severe cases.

**Aggravation of Pre-existing Conditions:** Persons with pre-existing skin disorders or impaired respiratory function may be more susceptible to the effects of the substance



#### Section 4-First Aid Measure

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

#### Section 5-Fire fighting procedure

**Fire:** Not considered to be a fire hazard. Toxic gases and vapors may be released if involved in a fire.

**Explosion:** Not considered to be an explosion hazard.

**Fire Extinguishing Media:** Use any means suitable for extinguishing surrounding fire.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

#### Section 6-Accidental Release Measure

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

#### Section 7-Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture and incompatibilities. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

#### Section 8-Exposure control/Personal protection

##### **Airborne Exposure Limits:**

-ACGIH Threshold Limit Value (TLV): 0.6 ppm (TWA)

##### **Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

##### **Personal Respirators (NIOSH Approved):**

If the exposure limit is exceeded and engineering controls are not feasible, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus. Breathing air quality must meet the requirements of the OSHA respiratory protection standard (29CFR1910.134).



**Skin Protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:** Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

### Section 9-Physical Chemical Properties

<b>Appearance</b>	: Yellow powder or crystals.
<b>Odor</b>	: Characteristic, disagreeable.
<b>Solubility</b>	: Very slightly soluble in water, soluble in alcohol.
<b>Density</b>	: 4.1
<b>pH</b>	: No information found.
<b>% Volatiles by volume @ 21C (70F)</b>	: 0
<b>Boiling Point</b>	: Decomposes.
<b>Melting Point</b>	: ca. 120C (ca. 248F)
<b>Vapor Density (Air=1)</b>	: No information found.
<b>Vapor Pressure (mm Hg)</b>	: No information found.
<b>Evaporation Rate (BuAc=1)</b>	: No information found.

### Section 10-Stability and Reactivity

<b>Stability</b>	: Heat will contribute to instability.
<b>Hazardous Decomposition Products</b>	: Burning may produce toxic iodine vapors.
<b>Hazardous Polymerization</b>	: Will not occur.
<b>Incompatibilities</b>	: Mercuric oxide, silver nitrate, tannin, calomel, strong oxidizers, lithium, metallic salts, strong bases, acetone.
<b>Conditions to Avoid</b>	: Heat, flames, ignition sources and incompatibles.

### Section 11-Toxicity Information

Oral Rat LD50: 355 mg/Kg. Inhalation Rat LC50: 165 ppm / 7H. Investigated as a tumorigen and mutagen.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		
	Known	Anticipated	IARC Category
Iodoform (75-47-8)	No	No	None

### Section 12-Ecological Information

**Environmental Fate:** When released into the soil, this material may leach into groundwater. When released into water, this material may evaporate to a moderate extent. When released into the water, this material is expected to have a half-life between 1 and 10 days. This material has an estimated bioconcentration factor (BCF) of less than 100. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of greater than 30 days.

**Environmental Toxicity:** This material is expected to be toxic to terrestrial life. This material is expected to be toxic to aquatic life. The LC50/96-hour values for fish are between 1 and 10 mg/l.



### Section 13-Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### Section 14-Transport Information

Not regulated.

### Section 15-Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
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Iodoform (75-47-8)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	DSL	NDSL	Phil.
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--Canada--				
Iodoform (75-47-8)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
-----				
Iodoform (75-47-8)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8(d)
-----			
Iodoform (75-47-8)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
 SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No  
 Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.



## Section 16-Additional Information

**NFPA Ratings:** Health: **2** Flammability: **0** Reactivity: **1**

**Label Hazard Warning:**

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CARDIOVASCULAR SYSTEM, CENTRAL NERVOUS SYSTEM, LIVER AND KIDNEYS.

**Label Precautions:**

Do not breathe dust.  
Do not get in eyes, on skin, or on clothing.  
Use only with adequate ventilation.  
Keep container closed.  
Wash thoroughly after handling.

**Label First Aid:**

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases call a physician.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

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