

## MATERIAL SAFETY DATA SHEET OF DIODOMETHANE

### SECTION 1. PRODUCT IDENTIFICATION

**MSDS Name:** Diiodomethane  
**Synonyms:** Methylene Iodide  
**Molecular Formula:** CH<sub>2</sub>I<sub>2</sub>  
**Company Identification:** Omkar Speciality Chemicals Ltd  
W-92, Unit-I, M.I.D.C. Badlapur (E),  
Dist. Thane, 421 503.

### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Chemical Name	Percent	EINECS/ELINCS
75-11-6	Diiodomethane	99	-

**Toxicological Data on Ingredients:** Methylene iodide LD50: Not available. LC50: Not available.

### SECTION 3. HAZARD IDENTIFICATION

#### EMERGENCY OVERVIEW

**Potential Acute Health Effects:**

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.  
Severe over-exposure can result in death.

**Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

### SECTION 4. FIRST AID

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

**Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

**Inhalation:**

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

**Serious Inhalation:**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation.

WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

**Ingestion:**

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**Serious Ingestion:** Not available.

## SECTION 5. FIRE AND EXPLOSION

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** Not available.

**Flash Points:** Not available.

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), halogenated compounds.

**Fire Hazards in Presence of Various Substances:**

Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:**

Potentially explosive reaction occurs between methylene iodide + diethyl zinc + alkenes. Mixtures of methylene iodide, and lithium, potassium, or sodium-potassium alloys are explosive and shock-sensitive.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**Small Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

**Large Spill:** Poisonous liquid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources.

## SECTION 7. HANDLING AND STORAGE

**Precautions:**

Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk; evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray.

Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## SECTION 8. PERSONAL PROTECTION/EXPOSURE CONTROLS

**Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:**

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state and appearance:** Pale Yellow Liquid.

**Odor:** Ethereal.

**Taste:** Not available.

**Molecular Weight:** 267.87 g/mole

**pH (1% soln/water):** Not applicable.  
**Boiling Point:** 180°C (356°F)  
**Melting Point:** 5.5°C (41.9°F)  
**Critical Temperature:** Not available.  
**Specific Gravity:** 3.321 g/cc  
**Vapor Pressure:** Not available.  
**Vapor Density:** Not available.  
**Volatility:** Not available.  
**Odor Threshold:** Not available.  
**Water/Oil Dist. Coeff.:** Not available.  
**Ionicity (in Water):** Not available.  
**Dispersion Properties:** See solubility in water, diethyl ether.  
**Solubility:** Soluble in diethyl ether. Insoluble in cold water.

## SECTION 10. REACTIVITY/STABILITY

**Stability:** The product is stable.  
**Instability Temperature:** Not available.  
**Conditions of Instability:** Excess heat, incompatibles  
**Incompatibility with various substances:** Not available.  
**Corrosivity:** Non-corrosive in presence of glass.  
**Special Remarks on Reactivity:**  
May have a hazardous reaction with lithium. Methylene iodide can release toxic and irritating iodide fumes when heated to decomposition. Copper-zinc alloys + ether + methylene iodide may have a violent reaction.  
**Special Remarks on Corrosivity:** Not available.  
**Polymerization:** Will not occur.

## SECTION 11. TOXICOLOGICAL INFORMATION

**Routes of Entry:** Absorbed through skin. Eye contact.  
**Toxicity to Animals:**  
LD50: Not available. LC50: Not available.  
**Chronic Effects on Humans:** MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.  
**Other Toxic Effects on Humans:** Hazardous in case of skin contact (irritant), of ingestion, of inhalation.  
**Special Remarks on Toxicity to Animals:**  
Lowest Published Lethal Dose: LDL [Child]- Route: Oral; Dose: 2778 ul/kg  
**Special Remarks on Chronic Effects on Humans:** May affect genetic material.  
**Special Remarks on other Toxic Effects on Humans:**  
Acute Potential Health Effects: Skin: Causes skin irritation.  
Eyes: Causes eye irritation.



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Inhalation: Vapor may cause respiratory tract irritation.

Ingestion: May cause gastrointestinal tract irritation (vomiting). May affect respiratory system (respiration, acute pulmonary edema), and behavior (somnolence, lethargy, incoordination). May also affect the liver and bone marrow.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are as toxic as the product itself.

**Special Remarks on the Products of Biodegradation:** Not available.

## SECTION 13. DISPOSAL

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## SECTION 14. TRANSPORTATION

**DOT Classification:** CLASS 6.1: Poisonous material.

**Identification:** : Toxic, liquid, n.o.s. (Methylene iodide) UNNA: 2810 PG: III

**Special Provisions for Transport:** Not available.

## SECTION 15. REGULATORY INFORMATION

**Federal and State Regulations:** TSCA 8(b) inventory: Methylene iodide

**Other Regulations:**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**

**WHMIS (Canada):** CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).

**DSCL (EEC):**

R36/38- Irritating to eyes and skin. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label.



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**HMIS (U.S.A.):****Health Hazard: 2****Fire Hazard: 1****Reactivity: 0****Personal Protection: h****National Fire Protection Association (U.S.A.):****Health: 2****Flammability: 1****Reactivity: 0****Specific hazard:****Protective Equipment:**

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Wear appropriate respirator when ventilation is inadequate. Splash goggles.

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**SECTION 16 - ADDITIONAL INFORMATION**

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This document is intended only as a guide to the appropriate precautionary handling of material by a person timed in chemical handling. The user is responsible for a determine the precautions & dangers of this chemical for his or her particular application depending on usage. Adequate protective clothing, including eye / face guards, approved respirators must be used to avoid contact with the material or breathing chemical vapors / fumes. Exposure to this product may cause adverse health effects.

This chemical may interact with other substances. since the potential uses are so varied, m/s. Omkar Speciality Chemicals Ltd. cannot warn of all of the potential dangers of use or interaction with chemicals of materials. M/s. Omkar Speciality Chemicals Ltd. warrants that, the chemical meets the specifications set forth on the test report.

M/s. Omkar Speciality Chemicals Ltd. Disclaims any other warranties expressed or implied with regard to the product supplied hereunder its merchantability or its fitness for a particular purpose. The user should recognize that, this product can cause severe injury, especially if improperly handled or the known dangers of use are not heeded.

READ ALL PRECAUTIONARY INFORMATIONS.