

### Material Safety Data Sheet

### ISOPHTHALOYL CHLORIDE

#### **Section 1 – Product and Company Information**

Substance	: Isophthaloyl Chloride, 1, 3 – Benzenedicarbonyl chloride
Trade Name	: Isophthaloyl Chloride
Chemical Family	: Acid Chloride
Company	: Shiva Pharmachem Ltd. Plot No. 588, Village: Luna – 391440 Taluka: Padra District: Vadodara, Gujarat India.
Phone No.	: +91 2662 221021 / 224360
Fax No.	: +91 2662 223314

#### **Section 2 – Hazards Identification**

##### **2.1 Classification of the substances or mixture**

##### **Classification according to regulations (EC) no 1272 / 2008 (EU GHS / CLP)**

Acute toxicity dermal (category 4), Skin Corrosion, (Category 1B)

##### **Classification according to EU directives 67/548/EEC or 1999/45/EC.**

Harmful in contact with skin. Causes burn.

##### **2.2 Labeling elements**

##### **Labeling according to EC 1272 / 2008 (CLP)**

##### **Pictogram**



##### **Single word**

**Danger**

##### **Hazard Elements**

H312

Harmful in contact with skin.

H314

Causes severe skin burn and eye damage

##### **Precautionary statements**

P280

Wear protective gloves/protective clothing/eye and face protection

P305 + P351 + P338

IF IN EYES: Rinse cautiously for several minutes.

P310

Immediately call physician

##### **According to EU directives 67/548/EEC as amended**

##### **Hazard symbol(s)**



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Corrosive

#### R PHRASE (s)

**R21**

Harmful in contact with skin

**R34**

Causes burn

#### S PHRASE (s)

**S26**

In case of contact with eyes rinse immediately with plenty of water and seek medical advice.

**S36/37/39**

Wear suitable protective clothing, gloves and eye/face protection.

**S45**

In case of accident or you feel unwell, seek medical advice. (Show the label where possible)

#### 2.3 Other hazard

None

### Section 3 – Composition / Information on Ingredients

Product Name	CAS No.	EC No.	Mol. Formula	Mol. Weight
ISOPHTHALOYL Chloride	99-63-8	202-774-7	C <sub>8</sub> H <sub>4</sub> Cl <sub>2</sub> O <sub>2</sub>	203.02 g/mol

### Section 4 – First Aid Measures

#### 4.1 Description of first aid measure

##### General advice

Consult to physician. Show this safety data to the doctor.

##### Inhalation

If inhaled, move person into fresh air. If Not breathing give artificial respiration. Consult physician.

##### Skin Contact

In Case of skin contact, flush with copious amounts of water for at least 15 minute.

Remove contaminated clothing and shoes. Call a Physician.

##### 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.

##### Ingestion

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

#### 4.2 Most important symptoms and effect, both acute and delayed.

Cough, shortness of breath, headache, nausea.

### Section 5 – Fire Fighting Measures

#### CONDITIONS OF FLAMMABILITY

Water hydrolyzes material liberating acidic gas which in contact with metal surfaces can generate flammable and/or explosive hydrogen gas.

#### EXTINGUISHING MEDIA

Suitable: Carbon dioxide. Dry chemical powder.

Unsuitable: Do not use water.

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#### **SPECIAL RISKS**

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### **SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### **SPECIFIC METHOD(S) OF FIRE FIGHTING**

Use water spray to cool fire-exposed containers.

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### **Section 6 – Accidental Release Measures**

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#### **PERSONAL PRECAUTION PROCEDURES 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.

#### **METHODS FOR CLEANING UP**

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**

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#### **HANDLING**

**Directions for Safe Handling:** Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

#### **STORAGE**

**Conditions of Storage:** Keep tightly closed.

#### **SPECIAL REQUIREMENTS**

Moisture sensitive.

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### **Section 8 - Exposure Controls / Personal Protection**

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#### **ENGINEERING CONTROLS**

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

#### **GENERAL HYGIENE MEASURES**

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

#### **PERSONAL PROTECTIVE EQUIPMENT**

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 particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

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Hand Protection: Compatible chemical-resistant gloves.  
Eye Protection: Chemical safety goggles.

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#### Section 9 - Physical and Chemical Properties

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Appearance Color	: Colorless
Form	: Solidifies on standing below 40 °C. Clear liquid above 40°C
pH	: Acidic
BP/BP Range	: 276 °C at 760 mmHg
MP/MP Range	: 43 - 44 °C
Flash Point	: 180 °C Method: closed cup
Flammability	: Not flammable
Autoignition Temp	: Data not available
Oxidizing Properties	: Product is not oxidizing
Explosive Properties	: Data not available
Lower Explosion Limits	: 1.5 %
Upper Explosion Limits	: 8.9 %
Vapor Pressure	: 0.08 hPa at 38 °C, 0.04 hPa at 25 °C
SG/Density	: 0.82 at 50°C
Vapor Density	: 7.0 at 25 °C
Solvent Content	: Nil
Water Content	: Decompose when contact with water.
Solubility	: Miscible with toluene, methylen, ethylene chloride.

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#### Section 10 - Stability and Reactivity

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##### STABILITY

Stable: Stable at normal conditions of temperature and pressure.  
Conditions to Avoid: Humid air steam. Reacts with water to form hydrochloric acid.  
Materials to Avoid: Water, Alcohols, Oxidizing agents, Strong bases.

##### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Hydrogen chloride gas.

##### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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#### Section 11 - Toxicological Information

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##### ACUTE TOXICITY

LD50 Oral Rat 2200 mg/kg

LD50 Oral Mouse 2221 mg/kg

Remarks: Behavioral: Food intake (animal). Behavioral: Change in motor activity (specific assay).  
Behavioral: Somnolence (general depressed activity).

LD50 Oral Rabbit 1175 mg/kg

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Remarks: Behavioral: Food intake (animal). Behavioral: Change in motor activity (specific assay). Behavioral: Somnolence (general depressed activity).

LD50 Skin Rabbit 1410 mg/kg

#### **IRRITATION DATA**

Skin Rabbit 200 mg  
Remarks: Open irritation test Eyes  
Rabbit  
40 mg  
Remarks: Mild irritation effect

#### **SENSITIZATION**

Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

#### **MUTAGENICITY**

Did not cause genetic damage in animal and cultured bacterial cell.

#### **SIGNS AND SYMPTOMS OF EXPOSURE**

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. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **ROUTE OF EXPOSURE**

##### **Skin Contact**

Causes burn.

##### **Skin Absorption**

Harmful if absorbed through skin.

##### **Eye Contact**

Causes burns. Lachrymator.

##### **Inhalation**

Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. May be harmful if inhaled

##### **Ingestion**

May be harmful if swallowed.

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### **Section 12 - Ecological Information**

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#### **AQUATIC TOXICITY**

LC50 Fathead minnow 133.7 mg/l 96hrs

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**BIODEGRADABILITY:** Readily biodegradable.

**BIOACCUMULATION:** Bioaccumulation is unlikely.

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### **Section 13 - Disposal Considerations**

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#### **SUBSTANCE 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. Do not re-use empty containers. Observe all federal, state, and local environmental regulations.

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### **Section 14 - Transport Information**

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#### **DOT Regulations**

UN No. : 3096  
Hazard Class : 8  
Packing Group : II  
Proper Shipping Name : Corrosive solid, acidic, organic, n.o.s. (Isophthaloyl chloride)

#### **RID/ADR**

UN No. : 3261  
Hazard Class : 8  
Packing Group : II  
Proper Shipping Name : Corrosive solid, acidic, organic, n.o.s. (Isophthaloyl chloride)

#### **IMDG**

UN No. : 3261  
Hazard Class : 8  
Packing Group : II  
Proper Shipping Name : Corrosive solid, acidic, organic, n.o.s. (Isophthaloyl chloride)  
Marine Pollutant : No  
Severe Marine Pollutant : No  
Technical Name : Required

#### **IATA**

UN No. : 3261  
Hazard Class : 8  
Packing Group : II  
Proper Shipping Name : Corrosive solid, acidic, organic, n.o.s. (Isophthaloyl chloride)  
Inhalation Packing Group I : No  
Technical Name : Required

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### **Section 15 - Regulatory Information**

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#### **CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES**

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**INDICATION OF DANGER: C**

Corrosive

**R-PHRASES:** 21/34

Harmful in contact with skin. Causes burns. Irritating to respiratory system.

**S-PHRASES:** 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.

**COUNTRY SPECIFIC INFORMATION**

Germany

WGK: 1

ID-Number: 7152

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### Section 16 - Additional Information

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Other information

	NEPS	HMIS
Health	2	2
Flammability	1	1
Reactivity/physical hazard	0	1

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