

# SILVER FERN CHEMICAL



## Safety Data Sheet

### Isophthalic Acid (PIA)

#### SECTION 1: IDENTIFICATION

---

**Product Name:** Isophthalic acid

**CAS Number:** 121-91-5

**Chemical Name:** Isophthalic acid

**Synonyms:** Benzene-1,3-dicarboxylic acid; *meta*-Phthalic acid; Purified Isophthalic Acid; PIA

**Uses:** Laboratory chemicals, Manufacture of substances

**Company**

Silver Fern Chemical, Inc.  
2226 Queen Anne Avenue North  
Seattle WA 98109, USA

**Business Contact**

Customer Service: 1-866-282-3384  
[info@silverfernchemical.com](mailto:info@silverfernchemical.com)

**24 Hour Emergency Contact** Infotrac

800-535-5053

Outside USA & Canada 352-323-3500

#### SECTION 2: HAZARD IDENTIFICATION

---

**Warning**

**Hazard Statements/ Classification of mixture:**  
May form combustible dust concentrations in air



**Precautionary Statements:**

P210: Keep away from heat/sparks/open flames. - No smoking.

P243: Take precautionary measures against static discharge.

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

---

CAS #	Content (W/W)	Ingredients
121-91-5	Isophthalic acid	<=100%

**Formula:** C<sub>8</sub>H<sub>6</sub>O<sub>4</sub>

**Molecular weight:** 166.13 g/mol



## SECTION 4: FIRST AID MEASURES

---

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration

**In case of skin contact :** Wash off with soap and plenty of water

**In case of eye contact:** Flush eyes with water as a precaution.

**If swallowed :** Never give anything by mouth to an unconscious person. Rinse mouth with water.

**General advice:** Move out of dangerous area.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling

**Indication of any immediate medical attention and special treatment needed:** No data available

## SECTION 5: FIRE FIGHTING MEASURES

---

**Flash Point:** No data available

**Lower/Upper explosion limit:** No data available

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture:** Carbon oxides

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary

**Special fire fighting procedurs:** Minimize dust generation and accumulation

## SECTION 6: ACCIDENTAL RELEASE MEASURES

---

**Clean-up Procedures and Containment:** Sweep up and shovel. Keep in suitable, closed containers for disposal

**Personal precautions, protective equipment and emergency procedures:** Avoid dust formation. Avoid breathing vapours, mist or gas.

**Special Instructions:** No special environmental precautions required.

## SECTION 7: HANDLING AND STORAGE

---

**Handling:** Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage:** Keep container tightly closed in a dry and well-ventilated place  
Keep in a dry place.

Storage class (TRGS 510): Non Combustible Solids

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control parameters:  
Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Isophthalic acid	121-91-5	TWA	10.000000 mg/m <sup>3</sup>	USA. Workplace Environmental Exposure Levels (WEEL)
		TWA	5.000000 mg/m <sup>3</sup>	USA. Workplace Environmental Exposure Levels (WEEL)

**Appropriate engineering control:** General industrial hygiene practice.

### Personal Protective Equipment (PPE)

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Eye protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body protection:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**General safety and hygiene measures:** No special environmental precautions required.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Form: Powder Color: beige
Odor	no data available
Odor Threshold	no data available
pH	no data available
Melting point/freezing Point	Melting point/range: 341 - 343 °C (646 - 649 °F) - lit.
Initial boiling point and boiling range	no data available

Flash point	no data available
Evaporation rate	Approx. 0 (n-BuAc=1)
Flammability (solid, gas)	Non-flammable
Upper/lower flammability or explosive limits	no data available
Vapor pressure	no data available
Vapor density	no data available
Water solubility	ca.0.12 g/l at 25 °C (77 °F) – soluble
Relative density:	1.53 g/cm <sup>3</sup> at 25 °C (77 °F)
Partition Coefficient: n-octanol/water	log Pow: 0.005 at 22 °C (72 °F)
Auto-ignition temperature	no data available
Decomposition temperature:	> 373 C ( DTA)
Viscosity:	no data available
Explosive properties:	no data available

## SECTION 10: STABILITY AND REACTIVITY

---

**Conditions to avoid:** no data available

**Substances to avoid:** Strong oxidizing agents, Strong bases

**Hazardous reactions:** no data available

**Decomposition products:** Carbon Monoxide. Carbon Dioxide.

**Chemical stability:** Stable under recommended storage conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

---

### Acute toxicity :

LD50 Oral - Rat - male and female - > 5,000 mg/kg  
(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - > 11,370 mg/m<sup>3</sup>  
(OECD Test Guideline 403)

LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg  
(OECD Test Guideline 402)

No data available

### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h  
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit

Result: No eye irritation - 2 s  
(OECD Test Guideline 405)**Respiratory or skin sensitization :**

Maximisation Test (GPMT) - Guinea pig

Result: Does not cause skin sensitisation.  
(OECD Test Guideline 406)**Germ cell mutagenicity :**

Hamster

ovary

Result: negative

**Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity :** no data available**Specific target organ toxicity - single exposure:** no data available**Specific target organ toxicity - repeated exposure:** no data available**Aspiration hazard:** no data available**Additional Information:**

RTECS: NT2007000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Stomach - Irregularities - Based on Human Evidence

**SECTION 12: ECOLOGICAL INFORMATION**

---

**Ecotoxicity :**

Toxicity to fish

static test LC50 - *Leuciscus idus melanotus* - > 907 mg/l - 96 h  
(OECD Test Guideline 203)Toxicity to daphnia and  
Other aquatic invertebratesstatic test EC50 - *Daphnia magna* (Water flea) - > 952 mg/l - 48 h  
(OECD Test Guideline 202)

Toxicity to algae

static test ErC50 - *Desmodesmus subspicatus* (*Scenedesmus subspicatus*) - > 1,000 mg/l - 96 h (OECD Test Guideline 201)

Toxicity to bacteria

Respiration inhibition EC50 - Sludge Treatment - 617.1 mg/l - 3 h  
(OECD Test Guideline 209)

**Biodegradability:**

aerobic - Exposure time 14 d

Result: 85 % - Readily biodegradable  
(OECD Test Guideline 301B)

**Bioaccumulative** no data available

**Potential:**

**Other:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

## SECTION 13: DISPOSAL CONSIDERATIONS

---

**Waste disposal of substance:** Offer surplus and non-recyclable solutions to a licensed disposal company

**Container disposal:** Dispose of as unused product

## SECTION 14: TRANSPORT INFORMATION

---

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.*

## SECTION 15: REGULATORY INFORMATION

---

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Chronic Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Isophthalic acid                      CAS-No.121-91-5

**New Jersey Right To Know Components**

Isophthalic acid                      CAS-No. 121-91-5

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## SECTION 16: OTHER INFORMATION

---

### HMIS Rating

Health hazard:	1
Chronic Health Hazard:	*
Flammability:	0
Physical Hazard	0

### NFPA Rating

Health hazard:	1
Fire Hazard:	0
Reactivity Hazard:	0

Revision date: 01/14/2015

### DISCLAIMER OF RESPONSIBILITY

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.

<end of document>