



SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: Terephthalic Acid (PTA)

Additional identification

Chemical name: terephthalic acid
CAS-No.: 100-21-0

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Chemical Intermediate

Uses advised against: None known.

Details of the supplier of the safety data sheet

Manufacturer / Supplier

Silver Fern Chemical Inc.
2226 Queen Anne Ave., North
Seattle, WA 98109 USA
Phone: 1-866-282-3384

info@silverfernchemical.com

Emergency telephone number:

For emergency health, safety, and environmental information, call

Infotrac 1-800-535-5053 USA & Canada

For all other countries call Infotrac 1-352-323-3500

SECTION 2: Hazards identification

Hazard Classification:

OSHA Specified Hazards:

Combustible dust May form combustible dust concentrations in air.

Warning label items including precautionary statement:

Signal Words: WARNING!

Hazard Statement(s): May form combustible dust concentrations in air.

Precautionary Statement:

Prevention: P210: Keep away from heat/sparks/open flames. - No smoking.
P243: Take precautionary measures against static discharge.

Disposal: 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.

Hazard(s) not otherwise classified (HNOC): None known.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification	Notes
terephthalic acid	100%	CAS-No.: 100-21-0	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First aid measures

Description of first aid measures

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist.

Skin contact: Wash with soap and water. Get medical attention if symptoms occur.

Ingestion: Seek medical advice. Material is not expected to be absorbed from the gastrointestinal tract so that induction of vomiting should not be necessary.

Most important symptoms and effects, both acute and delayed: No known chronic or acute health risks.

Indication of any immediate medical attention and special treatment needed

Hazards: None known.

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

General Fire Hazards: Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures.

Extinguishing media

Suitable extinguishing media: Water spray. Dry chemical. Carbon Dioxide.

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture:

Powdered material may form explosive dust-air mixtures.

Advice for firefighters

Special fire fighting procedures:

Minimize dust generation and accumulation.

Special protective equipment for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear appropriate personal protective equipment.

Environmental Precautions:

Not regarded as dangerous for the environment.

Methods and material for containment and cleaning up:

Sweep up and place in a clearly labeled container for chemical waste.

Notification Procedures:

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:

Precautions for safe handling:

Minimize dust generation and accumulation.

Conditions for safe storage, including any incompatibilities:

Keep container closed.

Specific end use(s):

Chemical Intermediate

SECTION 8: Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Country specific exposure limits have not been established or are not applicable unless listed below.

Chemical name	type	Exposure Limit Values	Source
terephthalic acid	TWA	10 mg/m ³	US. ACGIH Threshold Limit Values (01 2010)

Exposure controls

Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information:	Eye bath. Washing facilities.
Eye/face protection:	It is a good industrial hygiene practice to minimize eye contact.
Skin protection	
Hand Protection:	It is a good industrial hygiene practice to minimize skin contact.
Other:	No data available.
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.
Hygiene measures:	Observe good industrial hygiene practices.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	solid
Form:	Crystalline Powder.
Color:	White
Odor:	Slight
Odor Threshold:	No data available.
pH:	No data available.
Melting Point	402 - 404 °C sublimes
Boiling Point:	sublimes
Flash Point:	not applicable
Evaporation Rate:	No data available.
Flammability (solid, gas):	not applicable
Flammability Limit - Upper (%):	No data available.
Flammability Limit - Lower (%):	No data available.
Vapor pressure:	0.00158 Pa (25 °C)
Vapor density (air=1):	5.7
Specific Gravity:	1.51 (15 °C)
Solubility(ies)	
Solubility in Water:	0.017 g/l (25 °C)
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	log Pow: 1.76

Autoignition Temperature:	not applicable
Decomposition Temperature:	(HPDTA) No exotherm to 400°C
Dynamic viscosity:	No data available.
Kinematic viscosity:	not applicable
Explosive properties:	Not classified.
Oxidizing properties:	Not classified.

Other information

Dust Explosion Description Number	165 m.b_/s
Kst:	
Dust Explosion Class:	ST-1

SECTION 10: Stability and reactivity

Reactivity:	None known.
Chemical Stability:	Stable
Possibility of Hazardous Reactions:	None known.
Conditions to Avoid:	Avoid dust formation.
Incompatible Materials:	Strong oxidizing agents.
Hazardous Decomposition Products:	Carbon Monoxide. Carbon Dioxide.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation:	None known.
Ingestion:	None known.
Skin contact:	None known.
Eye contact:	None known.

Information on toxicological effects

Oral

Product:	No data available.
Specified substance(s): terephthalic acid	Oral LD-50: (Rat): > 15,380 mg/kg

Dermal

Product:	No data available.
Specified substance(s): terephthalic acid	Dermal LD-50: (Rabbit): > 2,000 mg/kg (highest dose tested)

Inhalation

Product: No data available.

Specified substance(s):
terephthalic acid LC50 (Rat, 2 h): > 2.02 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):
terephthalic acid NOAEL (Rat, in feed, 90 d): 1250 ppm

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):
terephthalic acid (Rabbit, 4 h): slight

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):
terephthalic acid (Rabbit): slight

Respiratory or Skin Sensitization

Product: No data available.

Specified substance(s):
terephthalic acid Skin Sensitization: (Guinea Pig): non-sensitizing Read-across from a similar material

Carcinogenicity

Product: No data available.

Toxicity to reproduction

Product: No data available.

Developmental toxicity

Product: No data available.

Germ Cell Mutagenicity

In vitro

Product: No data available.

Specified substance(s):
terephthalic acid Mutagenicity - Bacterial: negative
Chromosomal aberration: equivocal
Mutagenicity - Mammalian: negative Read-across from a similar material
Chromosomal aberration: negative

In vivo

Product: No data available.

Specified substance(s):
terephthalic acid Chromosomal aberration intraperitoneal injection (Mouse): negative

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

SECTION 12: Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

terephthalic acid LC-50 (Fish, 96 h): > 18.6 mg/l (limit of solubility in fresh water)
LC-50 (Fish, 96 h): > 961 mg/l Read-across from a similar material

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

terephthalic acid EC-50 (daphnid, 48 h): > 20.1 mg/l (limit of solubility in fresh water)
EC-50 (daphnid, 48 h): > 967 mg/l Read-across from a similar material

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

terephthalic acid NOEC: (daphnid, 21 d): 19.5 mg/l (limit of solubility in fresh water)

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s):

terephthalic acid ErC50 (Alga, 72 h): > 19 mg/l (limit of solubility in fresh water)
ErC50 (Alga, 72 h): > 668 mg/l Read-across from a similar material

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

terephthalic acid 82.6 % (14 d, Ready Biodegradability: CO2 Evolution Test) Readily biodegradable

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: 1.76

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

SECTION 13: Disposal considerations

Waste treatment methods

General information: No data available.

Disposal methods: Dispose of waste and residues in accordance with local authority requirements. Incinerate.

SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Class not regulated

IMDG - International Maritime Dangerous Goods Code

Class not regulated

IATA

Class not regulated

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture.:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
WHMIS (Canada) Status: noncontrolled

SARA 311-312 Hazard Classification(s):
fire hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List
NONE

OSHA: hazardous

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.KE-02190

Philippines Inventory (PICCS) : This product is listed on the Philippine Inventory or otherwise complies with PICCS.

Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 1, Flammability - 1, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered.

Revision Information: 11/06/2017

Key literature references and sources for data: No data available.

Training information: No data available.

Issue Date: 05/14/2015

SDS No.:

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