Silver Fern Chemical, Inc. Safety Data Sheet 1,2,4,5-Benzenetetrabarboxylic Acid

Section 1. Identification

Product identifier

Product Identity	1,2,4,5-Benzenetetrabarboxylic Acid
Other means of identification	2-phenyl-2-imidazoline pyromellitate; Curing Agent

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

See Technical Data Sheet.

Details of the supplier of the safety data sheet

Company Name	Silver Fern Chemical, Inc. 121 W. De La Guerra Street, Suite B Santa Barbara, CA 93101 USA Customer Service: 1-866-282-3384 / info@silverfernchemical.com Website - www.silverfernchemical.com
Emergency 24 hour Emergency Telephone No.	Emergency telephone number Infotrac: 1-800-535-5053; Outside USA & Canada +1-352- 323-3500
Customer Service:	

Section 2. Hazard(s) identification

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)

The substance is not classified according to the OSHA Hazcom or WHMIS regulations.

Revision Date: 05/20/2025



Label elements

The substance is not classified according to the OSHA Hazcom or WHMIS regulations.

[Prevention]

No GHS prevention statements [Response] No GHS response statements [Storage] No GHS storage statements [Disposal] No GHS disposal statements

Other hazards

This product contains no PBT/vPvB/vPvM chemicals. This product contains no endocrine disrupting chemicals.

Does not contain component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS) per US or Canadian regulations.

Section 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7).

Ingredient/Chemical Designations	Weight %	GHS	Notes
		Classification	
1,2,4,5-benzenetetracarboxylic acid, compound with 4,5-dihydro-2-phenyl-1h- imidazole (1:1) CAS Number: 54553-90-1 Synonyms: Amide resin	80 - 100		No data available

The actual concentration or concentration range is withheld as a trade secret.

*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.



Section 4. First aid measures

Description of first aid measures

- **General** In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
- **Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
- **Eyes** Rinse with plenty of clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
- **Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
- **Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Overview No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.

Section 5. Fire-fighting measures

Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray. Unsuitable extinguishing media: Do not use; water jet.

Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.



Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area. Wear SCBA during clean-up immediately after fire. No smoking.

ERG Guide No.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8). Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Environmental precautions

Do not allow spills to enter drains or waterways.

Methods and material for containment and cleaning up

Sweep up or pick up.

Section 7. Handling and storage

Precautions for safe handling

Handle containers carefully to prevent damage and spillage. **Conditions for safe storage, including any incompatibilities** Incompatible materials: No available information **Specific end use(s)** No available information



Section 8. Exposure controls / personal protection

Control parameters

Exposure Limits

CAS No.	Ingredient	Source	Value
54553-90-1	1,2,4,5-benzenetetracarboxylic acid, compound with 4,5-dihydro-2-phenyl-1h-imidazole (1:1)	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit

Exposure controls	
Respiratory	If workers are exposed to concentrations above the exposure limit they must
	use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended
Skin	Avoid skin contact. Protective gloves recommended.
Engineering	Provide adequate ventilation. Where reasonably practicable this should be
Controls	achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Section 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Powder
Color	White
Odor	Weak Odor
Melting point / freezing point	220~230°C
Initial boiling point and boiling range	No available information



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Flammability (solid, gas) Upper/lower flammability or explosive limits	Not Applicable Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	°F °C, Test method: (Open/Close cup)
Auto-ignition temperature	No available information
Decomposition temperature	No available information
рН	No available information
Viscosity (cSt)	No available information
Solubility in Water	No available information
Partition coefficient n-octanol/water (Log	No available information
Kow)	
Vapor pressure (Pa)	No available information
Relative Density	No available information
Vapor Density	No available information
Particle Characteristics	
Evaporation rate (Ether = 1)	No available information
Oxidising properties	No available information
Explosive properties	No available information

Other information

No other relevant information.

Section 10. Stability and reactivity

ReactivityHazardous Polymerization will not occur.Chemical stabilityStable under normal circumstances.Possibility of hazardous reactionsNo available informationConditions to avoidAvoid high temperatures and contact with incompatible materialIncompatible materialsNo available information



Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
1,2,4,5-benzenetetracarboxylic acid, compound with 4,5-	No data	No data	No data	No data	No data
dihydro-2-phenyl-1h-imidazole (1:1) - (54553-90-1)	available.	available.	available.	available.	available.

Carcinogen Data

CAS No.	Ingredient	Source	Value
54553-	1,2,4,5-benzenetetracarboxylic acid, compound with 4,5-dihydro-2-	OSHA	Regulated Carcinogen: No;
90-1	phenyl-1h-imidazole (1:1)	NTP	Known: No; Suspected: No;
		IARC	Group 1: No; Group 2a: No; Group 2b: No;
			Group 3: No;
		ACGIH	No Established Limit

Classification	Category	Hazard Description
Acute toxicity (oral)		Not Applicable
Acute toxicity (dermal)		Not Applicable
Acute toxicity (inhalation)		Not Applicable
Skin corrosion/irritation		Not Applicable
Serious eye damage/irritation		Not Applicable
Respiratory sensitization		Not Applicable
Skin sensitization		Not Applicable
Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Not Applicable



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STOT-single exposure	 Not Applicable
STOT-repeated exposure	 Not Applicable
Aspiration hazard	 Not Applicable

Possible routes of entry: No available information

Symptoms and effects, both acute and delayed:

No specific symptom data available.

No chronic toxicity or long term toxicity information available. Treat symptomatically.

Section 12. Ecological information

Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L
1,2,4,5-benzenetetracarboxylic acid, compound with 4,5-dihydro-2-phenyl-1h-	No data	No data available.	No data
imidazole (1:1) - (54553-90-1)	available.		available.

Persistence and degradability

There is no data available on the preparation itself.

Bioaccumulative potential

No available information

Mobility in soil

No available information

Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

Other adverse effects

No available information



Section 13. Disposal considerations

Waste treatment methods

Observe all federal, provincial and local regulations when disposing of this substance.

Section 14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
UN number	Not Regulated	Not Regulated	Not Regulated
UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
Transport hazard	Class:Not Applicable	Class:Not Applicable	Class:Not
class(es)	Sub Class:Not Applicable	Sub Class: Not Applicable	Applicable Sub Class: Not Applicable
Packing group	Not Applicable	Not Applicable	Not Applicable
Environmental h	azards		

Special precautions for user

IMDG Marine Pollutant: No;

No available information

Section 15. Regulatory information

RegulatoryThe regulatory data in Section 15 is not intended to be all-inclusive, onlyOverviewselected regulations are represented.

Classification of the substance or mixture under OSHA's Hazard Communication Standard (1910.1200) revised 2024 (GHS revision 7)



Silver Fern Chemical, Inc. Safety Data Sheet

1,2,4,5-Benzenetetrabarboxylic Acid

Toxic Substance Control Act (TSCA)

CAS	Ingredient	Toxic Substance Control	Comments	Status
Number		Act (TSCA)		
0054553-	1,2,4,5-benzenetetracarboxylic acid, compound with 4,5-dihydro-2-	Yes		ACTIVE
90-1	phenyl-1h-imidazole (1:1)			

The following flags are used:

- Active indicates commercial status designation of active
- •E indicates a substance that is the subject of a Section 5(e) Consent Order under TSCA.
- •F indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- •N indicates a polymeric substance containing no free-radical initiator in its Inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- •P indicates a commenced Premanufacture Notice (PMN) substance.
- •R indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- •S indicates a substance that is identified in a final Significant New Uses Rule.
- •SP indicates a substance that is identified in a proposed Significant New Uses Rule.
- •T indicates a substance that is the subject of a final Section 4 test rule under TSCA.
- •UVCB Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials •XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).
- •Y1 indicates a polymer that has a number-average molecular weight greater than 1,000 and that was exempt under the 1984 polymer exemption rule.
- •Y2 indicates a polymer that is a polyester and that was exempt under the 1984 polymer exemption rule.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 Label Warning:

This product contains no chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Mass RTK Substances (>1%) :

New Jersey RTK Substances (>1%) :

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Pennsylvania RTK Substances (>1%) :

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

OSHA Process Safety Management Standard Highly Hazardous Chemicals, Toxics and Reactives:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

US EPA List of Regulated Substances under the Risk Management Plan (RMP) Program:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

US EPA Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) under the Minimum Risk Exemption:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.



U.S. - DEA List II or Essential Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

U.S. - DEA - Exempt Chemical Mixtures - List 1 and 2:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

US DHS Chemical Facility Anti-Terrorism Standards (CFATS):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Section 16. Other information

Revision Date

05/20/2025

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, express 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 damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, 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.

The full text of the phrases appearing in section 3 is:

Not Applicable

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