

Silver Fern Chemical, Inc. Safety Data Sheet Ascorbic Acid FCC

1. Identification

1.1. Product identifier

Product Identity Ascorbic Acid FCC

Alternate Names Vitamin C

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

Intended use See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name Silver Fern Chemical, Inc.

2226 Queen Anne Avenue North

Seattle, WA 98109 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

Revision Date: 02/20/2023

+1-352-323-3500

2. Hazard(s) identification

Emergency Overview

WARNING! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING)

2.1. Classification of the substance or mixture

Combustible Dust May form combustible dust concentrations in air.

2.2. Label elements

Warning

May form combustible dust concentrations in air.

[Prevention]

P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

P240 Ground, bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating, light, equipment.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

[Response]

P370 In case of fire:

P378 Use alcohol resistant foam, CO², powder, water spray for extinction. Do not use water jet.

[Storage]

No GHS storage statements

[Disposal]

No GHS disposal statements

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|----------------------------------|----------|--------------------|-------|
| Ascorbic acid | ≥ 99% | Not Classified | |
| CAS Number: 0000050-81-7 | | | |

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4. First aid measures

4.1. 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.

4.2. Most important symptoms and effects, both acute and delayed

^{*}PBT/vPvB - PBT-substance or vPvB-substance.

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

Overview

No specific symptom data available.

Treat symptomatically. Check section 2.2 (GHS Label Elements) for further details.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.

Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

Ground, bond container and receiving equipment.

Use explosion-proof electrical, ventilating, light, equipment.

5.3. 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.

Dust explosions are possible.

ERG Guide No. --

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Nonsparking tools should be used.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.2. Environmental precautions

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Do not allow spills to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Silver Fern Chemical, Inc. Safety Data Sheet Ascorbic Acid FCC Page **3** of **9** Sweep or vacuum to clean up spills. Do not use any procedure which causes dispersion of dust into the air if any possibility of ignition exists. Dispose of in accordance with local, state and federal regulations.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Avoid dust generation when handling product to minimize dust explosion potential.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

Incompatible materials: No available information

Check section 2.2 (GHS Label Elements) for further details. - [Storage]

7.3. Specific end use(s)

No available information

Section 8. Exposure controls / personal protection

8.1. Control parameters

Exposure

| <u> </u> | | | | |
|--------------|---------------|--------|----------------------|--|
| CAS No. | Ingredient | Source | Value | |
| 0000050-81-7 | Ascorbic acid | OSHA | No Established Limit | |
| | | ACGIH | No Established Limit | |
| | | NIOSH | No Established Limit | |

The exposure limits for nuisance dust are: OSHA PEL: 15 mg/m³ (50 mppcf*) TWA, ACGIH 10 mg/m³.

8.2. 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 Controls It is recommended that all dust control equipment such as local exhaust ventilation

and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen- deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

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Use only appropriately classified electrical equipment and powered industrial trucks.

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.

Check section 2.2 (GHS Label Elements) for further details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Off White Solid

Odor Odorless

Odor threshold No available information

pH 2.1-2.6 5% aq.soln

Melting point / freezing point

190-192°C/374-377.6°F

Initial boiling point and boiling range

No available information

No available information

Evaporation rate (Ether = 1)

No available information

No available information

No available information

Upper/lower flammability or explosive limits Lower Explosive Limit: No available information

Upper Explosive Limit: No available information

Vapor pressure (Pa)No available informationVapor DensityNo available informationRelative DensityNo available information

Solubility in Water 333 g/L (20°C)

Partition coefficient n-octanol/water (Log Kow) No available information

Auto-ignition temperature 380°C/716°F

Decomposition temperatureNo available informationViscosity (cSt)No available informationOxidising propertiesNo available informationExplosive propertiesNo available informationFormula: C6 H8 O6

Molecular Formula & Weight
Weight: 176.13

9.2. Other information

No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No available information

10.4. Conditions to avoid

Avoid high temperatures and contact with incompatible material

10.5. Incompatible materials

No available information

10.6. 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 |
|---------------------------|---------------------|---------------------|---------------------------------------|---|--------------------------------|
| Ascorbic acid - (50-81-7) | No data | No data | No data | No data | No data |
| | available | available | available | available | available |

Carcinogen Data

| CAS No. | Ingredient | Source | Value | | |
|----------------|---------------------|--------|---------------------------|---|--|
| 0000050-81-7 | Ascorbic acid | OSHA | Regulated Carcinogen: No; | | |
| | | NTP | Known: No; | Suspected: No; | |
| | | IARC | Group 1: No; | Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; | |
| | | ACGIH | No Establishe | Vo Established Limit | |
| Classification | on | Ca | tegory | Hazard Description | |
| Acute toxic | city (oral) | | | Not Applicable | |
| Acute toxic | city (dermal) | | | Not Applicable | |
| Acute toxic | city (inhalation) | | | Not Applicable | |
| Skin corros | sion/irritation | | | Not Applicable | |
| Serious eye | e damage/irritation | | | Not Applicable | |
| Respiratory | y sensitization | | | Not Applicable | |
| Skin sensit | ization | | | Not Applicable | |
| Germ cell | mutagenicity | | | Not Applicable | |
| Carcinoger | nicity | | | Not Applicable | |
| Reproducti | ve toxicity | | | Not Applicable | |
| STOT-sing | gle exposure | | | Not Applicable | |

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

Section 12. Ecological information

12.1. Toxicity

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

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, | 48 hr EC50 crustacea, | ErC50 algae, |
|---------------------------|------------------|-----------------------|---------------|
| | mg/L | mg/L | mg/L |
| Ascorbic acid - (50-81-7) | Not Available | Not Available | Not Available |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

No available information

12.4. Mobility in soil

No available information

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No available information

Section 13. Disposal considerations

13.1. Waste treatment methods

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

Section 14. Transport information

| | DOT (Domestic Surface Transportation) | IMO / IMDG (Ocean Transportation) | ICAO/IATA |
|----------------------------------|--|--|--|
| 14.1. UN number | Not Regulated | Not Regulated | Not Regulated |
| 14.2. UN proper shipping name | Not Regulated | Not Regulated | Not Regulated |
| 14.3. Transport hazard class(es) | DOT Hazard Class: Not Applicable Sub Class: Not Applicable | IMDG: Not Applicable Sub Class: Not Applicable | Air Class: Not Applicable Sub Class: Not Applicable |
| 14.4. Packing group | Not Applicable | Not Applicable | Not Applicable |

14.5. Environmental hazards

Marine Pollutant: No;

14.6. Special precautions for user

No available information

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented.

Toxic Substance All components of this material are either listed or exempt from listing on the TSCA

Control Act (TSCA) Inventory.

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.

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.

Section 16. Other information

Revision Date 02/20/2023

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.

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.3 The full text of the phrases appearing in section 3 is:

Not Applicable

End of Document

Approved - TL 2-20-23