

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate

1. Identification

| 1.1. Product identifier | |
|--|--|
| Product Identity | Dimethyl Glutarate |
| Alternate Names | DMS-400; Dimethyl Glutarate - Pentanedioic acid, |
| | 1,5-dimethyl ester; Pentanedioic acid, dimethyl |
| | ester |
| 1.2. Relevant identified uses of the substance or r | nixture and uses advised against |
| Intended use | See Technical Data Sheet. |
| 1.3. Details of the supplier of the safety data shee | t |
| 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 |
| | +1-352-323-3500 |
| | |

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Aquatic Acute 3;H402 Harmful to aquatic life.

2.2. Label elements

H402 Harmful to aquatic life.

[Prevention]

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 1 of 9 P273 Avoid release to the environment.[Response]No GHS response statements[Storage]No GHS storage statements[Disposal]

P501 Dispose of contents or container in accordance with local and national regulations.

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 |
|--|----------|--------------------|-------|
| Dimethyl glutarate CAS Number: 0001119-40-0 | 99-100 | Not Classified | |
| CAS Mulliper. 0001117-40-0 | | | |

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

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

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

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 s | symptoms and effects, both acute and delayed |
| Overview | No specific symptom data available. |
| | Treat symptomatically. Check section 2.2 (GHS Label Elements) for further details. |

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 2 of 9

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.

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.

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).

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

Do not allow spills to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8. Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

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

7.2. Conditions for safe storage, including any incompatibilities

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

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 3 of 9

8.1. Control parameters

| Exposure | | | | | |
|---------------------------------|--------------------|-------|----------------------|--|--|
| CAS No. Ingredient Source Value | | | | | |
| 0001119-40-0 | Dimethyl glutarate | OSHA | No Established Limit | | |
| | | ACGIH | No Established Limit | | |
| | | NIOSH | No Established Limit | | |

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 | Provide adequate ventilation. Where reasonably practicable this should be 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. |
| | |

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 | Colorless Liquid |
|--|---|
| Odor | Sweet |
| Odor threshold | No available information |
| рН | No available information |
| Melting point / freezing point | -37°C (-34.6°F) |
| Initial boiling point and boiling range | 212°C (413.6°F) |
| Flash Point | Closed cup: 106.7°C (224.1°F) [Pensky-Martens.] |
| Evaporation rate (Ether = 1) | No available information |
| Flammability (solid, gas) | No available information |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: No available information |
| | Upper Explosive Limit: No available information |
| Vapor pressure (Pa) | 0.0084 kPa (0.063 mm Hg) [room temperature] |

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 4 of 9

| Vapor Density | No available information |
|---|---|
| Relative Density | 1.082 g/cm^3 |
| Solubility in Water | 63.1 g/l |
| Partition coefficient n-octanol/water (Log Kow) | Partition coefficient: n-octanol/water |
| Auto-ignition temperature | 440°C (824°F) |
| Decomposition temperature | No available information |
| Viscosity (cSt) | Dynamic (room temperature): 3.66 mPa·s (3.66 cP) Kinematic (room temperature): 0.0253 cm ² /s (2.53 cSt) Kinematic (40°C (104°F)): 0.017 cm ² /s (1.7 cSt) |
| Oxidising properties | No available information |
| Explosive properties | No available information |
| Density | 1.082 g/cm^3 |

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).

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 5 of 9

| 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 |
|----------------------------------|---------------------|---------------------|---------------------------------------|---|--------------------------------|
| Dimethyl glutarate - (1119-40-0) | > 5,000.00, Rat - | >2,000.00, Rat - | No data | No data | No data |
| | Category: NA | Category: 5 | available | available | available |

Carcinogen Data

| CAS No. | Ingredient | Source | | Value | |
|--------------|----------------------|--------|-------------------------------|---|--|
| 0001119-40-0 | Dimethyl glutarate | OSHA | SHA Regulated Carcinogen: No; | | |
| | | NTP | Known: No; | Suspected: No; | |
| | | IARC | - | ; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; | |
| | | | No Establish | | |
| Classificat | ion | Ca | tegory | Hazard Description | |
| Acute tox | icity (oral) | | | Not Applicable | |
| Acute tox | icity (dermal) | | | Not Applicable | |
| Acute tox | icity (inhalation) | | | Not Applicable | |
| Skin corro | osion/irritation | | | Not Applicable | |
| Serious ey | ve damage/irritation | | | Not Applicable | |
| Respirator | ry sensitization | | | Not Applicable | |
| Skin sensi | tization | | | Not Applicable | |
| Germ cell | mutagenicity | | | Not Applicable | |
| Carcinoge | enicity | | | Not Applicable | |
| Reproduct | tive toxicity | | | Not Applicable | |
| STOT-sin | gle exposure | | | Not Applicable | |
| STOT-rep | eated exposure | | | Not Applicable | |
| Aspiratior | n hazard | | | Not Applicable | |

Section 12. Ecological information

12.1. Toxicity

Harmful to aquatic life. Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, | 48 hr EC50 crustacea, | ErC50 algae, | |
|----------------------------------|----------------------------|-----------------------|---------------|--|
| | mg/L | mg/L | mg/L | |
| Dimethyl glutarate - (1119-40-0) | 19.60, Pimephales promelas | 122.10, Daphnia magna | Not Available | |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

No available information

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 6 of 9

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

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13.1. Waste treatment methods

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

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| 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 | g 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 haz | ards | | | |
| 14.6. Special precautions | ine Pollutant: No; for user wailable 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 SubstanceAll components of this material are either listed or exempt from listing on the TSCAControl 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.

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 7 of 9

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%):

Methanol

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:



WARNING: This product can expose you to chemicals including [Methanol], which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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.

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 8 of 9

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

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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

End of Document

Approved – TL 3-9-23

Silver Fern Chemical, Inc. Safety Data Sheet Dimethyl Glutarate Page 9 of 9