# Silver Fern Chemical, Inc.

## Safety Data Sheet

Diglycolamine(DGA)

## Section 1: Identification

**Product Name:** Diglycolamine (DGA)

**Synonyms:** 2-(2-Aminoethoxy)ethanol (ADEG)
Diethylene Glycol Amine; 2,2'-hydroxyethoxyethylamine; Aminodiglycole

**CAS #:** 929-06-6

**Chemical Formula:** C4H11NO2

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

**Emergency Number:** +1-800-535-5053
Outside USA & Canada +1-352-323-3500

**Recommended Use:** Industrial uses.

**Restrictions on Use:** No data available.

## Section 2: Hazard Identification

**GHS Label elements:**

| GHS Classification | Category |
|---|---|
| Acute toxicity, dermal | 4 |
| Acute toxicity, oral | 5 |
| Skin corrosion/irritation | 1 |

**Pictogram:**

**Signal Word:** **Danger**

| Code | Hazard Statement |
|---|---|
| H303 | May be harmful if swallowed |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |

| Code | Precautionary Statement |
|---|---|
| P260 | Do not breathe dust/fumes/gas/mist/vapor/spray. |
| P264 | Wash thoroughly after handling. |
| P280 | Wear protective gloves/clothing and eye/face protection. |
| P301+ P312 | IF SWALLOWED: Call A POISON CENTER/doctor, if you feel unwell. |
| P301+ P330+ P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P302+ P352 | IF ON SKIN: Wash with plenty of water. |
| P303+ P361+ P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse with water [or shower]. |

| | |
|---|---|
| P304+ P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+ P351+ P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor |
| P312 | Call A POISON CENTER/doctor, if you feel unwell. |
| P362+ P364 | Take off contaminated clothing and wash it before reuse. |
| P363 | Wash contaminated clothing before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional regulations. |

**Other classifications:**

| **NFPA Rating:** | | **HMIS Rating:** | |
|---|---|---|---|
| Health: | 3 | Health: | 3 |
| Fire: | 1 | Flammabilitv: | 1 |
| Reactivitv: | 0 | Phvsical: | 0 |

## Section 3: Composition / Information on Ingredients

| Component | CAS Number | Concentration | EC Number |
|---|---|---|---|
| 2-(2-aminoethoxy) ethanol | 929-06-6 | 98 - 100 % | 213-195-4 |

## Section 4: First Aid Measures

**Inhalation:**
Remove to fresh air.
If breathing is difficult, give oxygen provided a qualified individual is present.
If not breathing, apply artificial respiration.
Get medical attention.

**Ingestion:**
Do NOT induce vomiting unless directed to do so by medical personnel.
If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
If victim is conscious and alert, rinse mouth with water and give plenty of water to drink.
Never give anything by mouth to an unconscious person.
Get immediate medical attention.

**Skin Contact:**
Flush skin with plenty of soap and water, while removing contaminated clothing and shoes.
Wash clothing before reuse or discard if they cannot be thoroughly cleaned.
Get immediate medical attention.

**Eve Contact:**
Flush eyes with plenty of water for at least 15 minutes, lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do so.
Get immediate medical attention.

**Note to Phvsician:**
Treat symptomatically and supportively.

## Section 5: Fire Fighting Measures

**Extinguishing Media:**
Use extinguishing media appropriate for surrounding fire.

**Special Protective Equipment:**
Wear a self-contained breathing apparatus MSHA/NIOSH (approved or equivalent), and full protective gear.

**Specific Hazards:**
Fire residues and contaminated water must be disposed of in accordance with local regulations.
Dike fire control water for appropriate disposal.

## Section 6: Accidental Release Measures

**Emergency Procedures:**
Wear personal protection equipment.
Avoid contact with skin, eyes and clothing.
Avoid breathing vapors, mist or gas.
Ensure adequate ventilation.
Keep unnecessary personnel away and upwind.

**Environmental Precautions:**
Prevent further leakage or spillage if safe to do so.
Do not let product enter drains.

**Methods of containment/cleanup:**
Absorb with inert materials and place into appropriate containers for disposal.
Large spills should be collected mechanically (remove by pumping) for disposal.
Wash residual traces with water.
Notify appropriate authorities and dispose of in accordance with applicable requirements.

## Section 7: Handling and Storage

**Handling:**
Wear personal protection equipment.
Avoid contact with eyes, skin and clothing.
Avoid ingestion and inhalation.
Use only in well-ventilated area.
Wash thoroughly after handling.

Empty containers retain product residue (liquid and/or vapor), and can be dangerous.
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to sources of ignition.

Ground and bond containers when transferring material to avoid static discharges.
Use spark-proof tools and explosion-proof equipment.
Take precautionary measures against static discharge.

**Storage:**
May yellow after lengthy storage.

Store tightly closed container in a cool, dry, well-ventilated area.
Keep isolated from incompatible materials.

Store containers in a room at ambient temperature and pressure.

**Suitable packaging material:** Carbon/stainless steel, high density polyethylene (HDPE), or glass.

## Section 8: Exposure Controls / Personal Protection

**Exposure Limit:**
No exposure limits established.

**Engineering Controls:**
Use adequate ventilation to keep airborne concentrations low.
An emergency eye wash/shower must be readily accessible to the work area.

**Personal Protective Equipment:**

**Respirators:**
Follow the OSHA respirator regulations found in 29 CFR 1910.134. In confined areas, use a self-contained breathing apparatus.

**Skin Protection:**
Wear appropriate protective gloves and clothing to prevent skin exposure.

**Recommended glove material:** Nitrile rubber

**Eye Protection:**
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

## Section 9: Physical and Chemical Properties

| | |
|---|---|
| **Physical State:** | Liquid |
| **Color:** | Clear, colorless to yellow |

| | |
|---|---|
| **Odor:** | Amine-like |
| **Odor Threshold:** | Not determined due to potential health hazard by inhalation. |
| **pH:** | 10.2 (10 g/l at 20 °C) |
| **Melting/Freezing Point:** | -11 °C |
| **Boiling Point:** | 222.5°C to 223.8 °C |
| **Decomposition Temperature:** | 345 °C |
| **Flash Point:** | 127 °C |
| **Auto-ignition Temperature:** | 370 °C |
| **Flammability/Explosive Limits:** | Lower: 2 % (V) |
| **Vapor Pressure:** | 0.01423 hPa at 20 °C |
| **Vapor Density (air=1):** | No data available |
| **Relative Density (water=1):** | 1.06 at 20 °C |
| **Solubility (in water):** | Completely Miscible |
| **Partition coefficient: n-Octanol/water:** | Log Pow: -1.89 |
| **Evaporation Rate (Butyl Acetate=1)** | No data available |
| **Kinematic Viscosity** | No data available |
| **Molecular Weight:** | 105.14 g/mol |

## Section 10: Stability and Reactivity

| | |
|---|---|
| **Stability:** | Stable at room temperature and under normal conditions. |
| **Hazardous Reactions:** | Strong exothermic reaction with acids. |
| **Conditions to Avoid:** | Avoid heat, sparks, open flames and other sources of ignition. |
| **Incompatible Materials:** | Strong oxidizing agents, strong acids. |
| **Decomposition Products:** | Carbon oxides, nitrogen oxides. |

## Section 11: Toxicological Information

**Potential Health Effects:**

| | |
|---|---|
| Inhalation: | Not expected to be harmful. |
| Skin Contact: | Harmful in contact with skin<br>Causes severe skin burns. |
| Eye Contact: | Causes severe eye damage. |
| Ingestion: | May be harmful if swallowed. |

**Numerical Measures of Acute Toxicity:**

| Route | Test | Subject | Value | Time |
|---|---|---|---|---|
| Oral | LD 50 | Rat | 3,400 mg/kg | |
| Dermal | LD 50 | Rabbit | > 3,000 mg/kg | |

**Additional Information:**

RTEC #: KJ6125000

| | |
|---|---|
| Aspiration Toxicity: | No aspiration hazard expected. |
| Carcinogenicity: | This product is not classified as a carcinogen by IARC or U.S. ACGIH, NTP or OSHA. |
| Germ cell mutagenicity: | Not classified based on available information. |
| Reproductive toxicity: | Not classified based on available information. |
| Sensitization: | Not classified based on available information. |
| STOT - Repeated Exposure: | Not classified based on available information. |
| STOT - Single Exposure: | Not classified based on available information. |

## Section 12: Ecological Information

| Ecotoxicity | Group | Test | Subject | Value | Time |
|---|---|---|---|---|---|
| | Fish: | LC 50 | Leuciscus idus | 460 mg/L | 96 hours |
| | Aquatic invertebrates: | EC 50 | Daphnia magna | 189 mg/L | 48 hours |
| | Aquatic plants: | EC 50 | Scenedesmus subspicatus | 202 mg/L | 72 hours |
| | Micro-organisms: | EC 50 | Pseudomonas putida | 110 mg/L | 17 hours |

**Persistence and Degradability:** Readily Biodegradable.

**Bioaccumulative Potential:** Low potential for bioaccumulation.

**Mobility in Soil:** High potential for soil mobility.

## Section 13: Disposal Considerations

**Packaging:** Empty containers may retain product residue, follow label warnings even after container is emptied.

**Disposal:** Dispose of according to Federal, State, and Local Regulations.

## Section 14: Transportation Information

***The information in this section is for reference only and should not take the place of a bill of lading specific to an order.***

**UN #:** UN3055
**Proper Shipping Name:** 2-(2-Aminoethoxy) ethanol

**Transport Hazard Class:** 8
**Packing Group:** III
**Labels & Placards:** CORROSIVE
**Marine Pollutant:** No
**EMS:** F-A, S-B

## Section 15: Regulatory Information

**US Federal - TSCA:** This product is listed on the TSCA active inventory.

**California - Prop 65:** This product is not subject to the State of California's Proposition 65 regulations.

## Section 16: Other Information

**Revision Date:** Wednesday, February 26, 2020

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