SAFETY DATA SHEET (SDS)
According to the UN Globally Harmonized System (GHS)
Product: Solid Earth®

SECTION 1: Identification

- **Product Name:** Solid Earth®
- **Other Identifiers:** Dust Control Agent, Dust Inhibitor, Dust Retardant, Soil Stabilizer
- **Recommended Use:** Soil stabilizer and dust control agent for unpaved roads, pathways, and erosion-prone surfaces
- **Restrictions on Use:** None identified
- **Manufacturer/Supplier:**
  Solid Earth®
  1027 E Curry Rd, Tempe, AZ 85288, USA
  Tel: +1 480-446-9000 | Fax: +1 480-446-9001
  Website: https://www.solidearthinc.com
- **Emergency Contact:**
  Hadar Rahav – President
  Email: hadar@solidearthinc.com

SECTION 2: Hazard(s) Identification

- **Hazard Classification:**
  Not classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200)
- **Signal Word:** None required
- **Hazard Statements:**
  - May cause slight eye and skin irritation
  - Harmful if swallowed and enters airways
- **Precautionary Statements:**
  - Avoid prolonged skin contact
  - Avoid breathing mist or vapor
  - Use in well-ventilated areas
- **Pictograms:** None required
- **Hazards Not Otherwise Classified:** None
- **Unknown Acute Toxicity:** Not applicable

SECTION 3: Composition/Information on Ingredients

Mixture:

Ingredient	Approx. %	CAS No.	Classification
Binder	~85%	N/A	Proprietary, trade secret
Mineral oils + Surfactants	~0.3%	N/A	Proprietary
Water	~14%	7732-18-5	Not hazardous

Note: Specific composition withheld as a trade secret.

SECTION 4: First-Aid Measures

- **Inhalation:** Move to fresh air. Seek medical attention if symptoms persist.
- **Skin Contact:** Wash with soap and water. Remove contaminated clothing. Seek medical attention if irritation develops.
- **Eye Contact:** Flush with clean water for several minutes. Seek medical attention if irritation persists.
- **Ingestion:** Do not induce vomiting. Seek immediate medical attention if symptoms appear.
- **Most Important Symptoms:** Respiratory distress if inhaled or ingested; possible mild skin or eye irritation.

SECTION 5: Fire-Fighting Measures

- **Suitable Extinguishing Media:** Water fog, foam, dry chemical, CO_2
- **Unsuitable Media:** Do not use a high-pressure water stream
- **Specific Hazards:** Product will burn on prolonged exposure to flame
- **Protective Equipment for Firefighters:** Wear self-contained breathing apparatus (SCBA)

SECTION 6: Accidental Release Measures

- **Personal Precautions:** Avoid contact with skin, eyes, and clothing. Use appropriate PPE.
- **Containment:** Prevent entry into drains or waterways. Use earth or sand to create barriers.
- **Clean-up Methods:** Absorb with inert material (sand, clay). Collect into containers for disposal.
- **Additional Advice:** Notify local authorities if spill is uncontainable.

SECTION 7: Handling and Storage

- **Handling:**
  - Avoid inhalation and eye contact
  - Wear suitable PPE
  - Practice good hygiene
- **Storage:**
  - Store in original, tightly closed containers
  - Optimal temp: 8–21°C
  - Keep in cool, dry, ventilated space
  - Do not return unused material to original container

SECTION 8: Exposure Controls/Personal Protection

- **Exposure Limits:** Not established for this product
- **Engineering Controls:** Use in well-ventilated areas
- **PPE:**
  - **Eye/Face Protection:** Safety glasses or goggles

- **Skin Protection:** Chemical-resistant gloves, protective clothing for prolonged contact
- **Respiratory Protection:** Not needed under normal use; use mask in poorly ventilated spaces
- **Hygiene Measures:** Wash thoroughly after handling

SECTION 9: Physical and Chemical Properties

Property	Value
Appearance	White viscous liquid
Odor	Resinous/rubbery
Odor Threshold	Not determined
pH	4.58
Boiling Point	98.2 ºC
Freezing Point	-1.25 ºC
Specific Gravity	8.62 lb./US gal - 1.032g/ml
Solubility	Soluble in water and solvents
Viscosity	443.9 cps @ 20 rpm

SECTION 10: Stability and Reactivity

- **Reactivity:** No known reactivity hazards
- **Chemical Stability:** Stable under normal conditions
- **Possibility of Hazardous Reactions:** None known
- **Conditions to Avoid:** Excessive heat, freezing temps
- **Incompatible Materials:** Strong oxidizing agents
- **Hazardous Decomposition Products:** CO, CO_2 under combustion

SECTION 11: Toxicological Information

- **Likely Routes of Exposure:** Inhalation, skin and eye contact, ingestion
- **Acute Effects:**
  - Skin: Slight irritation possible
  - Eyes: Slight irritation
  - Ingestion: May cause nausea or aspiration hazard
  - Inhalation: Irritation with prolonged exposure
- **Chronic Effects:** None known
- **Toxicity Data:** Not established
- **Carcinogenicity:** Not listed by IARC, NTP, or OSHA

SECTION 12: Ecological Information (non-mandatory)

- **Ecotoxicity:** Low impact on plants and aquatic life
- **Persistence & Degradability:** Readily biodegradable
- **Bioaccumulation:** Not expected
- **Mobility in Soil:** Product binds with soil; limited leaching
- **Other Adverse Effects:** None known

Chemical Contents	Chemical Compounds	Significance	Acceptable Levels
Chloride	Cl	• Presence is salty, corrodes pipes pumps and plumbing fixtures • Not harmful to health	• Maximum safe level in drinking water: 250 mg/L [1]
Phosphorus	PO_4	• Presence leads to growth of aquatic algae and plants	• Maximum safe level in rivers: 0.1 mg/L [2]
Ammonia, Nitrite, Nitrate	NH_4, NO_2, NO_3	• Presence of Ammonia in high levels causes toxic buildup in tissues and blood. Presence of Nitrite and Nitrate in high levels increase heart rate, nausea and headaches.	• Ammonia Range for safe level in water: 0.25 mg/L to 32.5 mg/L [3] • Maximum safe levels of Nitrite and Nitrate: 1 mg/L and 10 mg/L respectively [3]

Chemical	Control (mg/L)	10:1 (mg/L)	20:1 (mg/L)	Acceptable Levels
Cl	0.197	30.183	44.9	Maximum safe level in drinking water: 250 mg/L[1]
PO_4	0.002	0.072	0.026	Maximum safe level in rivers: 0.1 mg/L[2]
NH_4	ND	1.19	ND	• Ammonia Range for safe level in water: 0.25 mg/L to 32.5 mg/L [3] • Maximum safe levels of Nitrite and Nitrate: 1 mg/L and 10 mg/L respectively [3]
NO_2	0.0005	0.0058	0.0024	
NO_2 +NO_3	0.004	0.057	0.011	
DIC	6.087	36.18	37.53	• In most surface water 3.5 to 350ppm [4]
DOC	0.8272	56.96	50.99	• Surface waters typically show thousands of mg/L depending on the source [5]

Concentrations of importance (ppm)	Control	10 to 1	20 to 1	Significance
Ca (Calcium)	0.51	60.25	43.31	• In water, high levels can contribute to water hardness and may affect industrial processes and water distribution systems. • In soil, excessively high levels can interfere with the uptake of other essential nutrients by plants. • Permissible levels of Calcium is 75ppm according to WHO for drinking water [7]
K (Potassium)	1.09	4.43	7.33	• Potassium is not a concern as a pollutant • Permissible levels of Potassium is 12ppm according to WHO for drinking water [7]
Mg (Magnesium)	0.31	6.78	5.99	• Major contributor to water hardness, along with calcium • High levels in irrigation water can contribute to soil salinity and affect plant growth. • It may be necessary to consider the content in irrigation water to prevent soil degradation • Permissible levels is 50ppm according to WHO for drinking water [7]
Na (Sodium)	2.1	55.89	58.4	• High sodium levels contribute to high salinity • Permissible levels is 250ppm according to WHO for drinking water [7]

SECTION 13: Disposal Considerations (non-mandatory)

- **Waste Disposal:** Dispose in accordance with local, state, and federal laws. Do not release into waterways.
- **Container Disposal:** Recycle or dispose via licensed contractor.
- **Special Precautions:** Avoid incineration without approval

SECTION 14: Transport Information (non-mandatory)

- **UN Number:** Not applicable
- **UN Proper Shipping Name:** Not applicable
- **Transport Hazard Class:** Not applicable
- **Packing Group:** Not applicable

- **Environmental Hazards:** No
- **Bulk Transport:** Not available
- **Special Precautions:** None

Since Solid Earth® does not meet the criteria for hazardous substances under DOT, OSHA, or GHS classifications, no UN number is required or applicable for its transportation

SECTION 15: Regulatory Information (non-mandatory)

- **U.S. OSHA Classification:** Non-hazardous per 29 CFR 1910.1200
- **SARA Title III Sections 302, 304, 311/312, 313:** Not listed
- **TSCA Inventory:** All components listed or exempt
- **California Proposition 65:** This product does not contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm

SECTION 16: Other Information

- **SDS Prepared By:** Solid Earth® Technical Department
- **Last Revision Date:** July 2025
- **Disclaimer:**
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