



# SAFETY DATA SHEET

## ESAR – Acid Replacement

### I. IDENTIFICATION

**GHS Product Identifier:** ESAR – Acid Replacement  
**Other means of identification:** Cleaning & Odour Solutions  
**Product Type:** Free-flowing Liquid  
**Application:** Acid Replacement  
**IHC:** 3402.20.51.00  
**Manufacturer Details:** Earth Smart Solutions  
130 – 60 Industry Way S.E.,  
Calgary, AB., CA. T3S 0A2  
1-866-444-7174  
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### II. HAZARD IDENTIFICATION

Classification of the substance or mixture:



GHS05 Corrosion

Skin Corrosion - Category 1b

H315 Causes skin & eye irritation.

Serious Eye Damage - Category 1b

H319 Causes serious eye irritation

**GHS label elements** the product is classified and labeled according to the Globally Harmonized System (GHS).

**Hazard pictograms**



GHS05

**Signal word:** Warning

**Hazard-determining components of labeling:** Organic Salt

**Hazard statements:** H315 Causes skin & eye irritation

**Precautionary statements**

- Do not breathe dust/fume/gas/mist/vapours/spray.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a poison center/doctor.
- Specific treatment (see on this label).
- Wash contaminated clothing before reuse.
- Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.

### III. COMPOSITION

**Chemical characterization:** Mixtures

**Description:** Mixture of the substance listed below with nonhazardous additions

Ingredient Name	%	CAS Number
Organic Salt -  Skin Corrosion – Category 1b, H315; Serious Eye Damage – Category 1b, H319	30-60% w/w*	506-89-8

\*Actual concentration ranges are withheld as a trade secret

**Additional Information:** The specific chemical identity and/or exact percentage composition has been withheld as a trade secret.



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### IV. FIRST AID MEASURES

**Eye Contact:** May cause irritation. Contact lenses should not be worn when working with chemicals.

**First Aid:** Immediately flush eyes with water, continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

**Recommended Precautions:** Wear appropriate safety goggles and limit exposure.

**Skin Contact:** Exposure may cause irritation if a person has a history of dermal allergic reaction.

**First Aid:** Wash out mouth with water. If material has been swallowed, give two glasses of water to dilute product, do not induce vomiting.

**Recommended Precautions:** Limit exposure.

**Ingestion:** Considered non-toxic but may lead to nausea or diarrhea.

**First Aid:** Wash out mouth with water. If material has been swallowed, give two glasses of water to dilute product, do not induce vomiting. Contact physician immediately.

**Recommended Precautions:** Store in safe place. Wear protective mask.

**Inhalation:** Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat & lungs.

**First Aid:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

**Recommended Precautions:** Avoid creating dust in non-ventilated areas.

**General Precautions:** Wash hands after handling free product.

### V. FIRE – FIGHTING MEASURES

**Suitable Extinguishing Media:** Water, carbon dioxide, dry chemical at temperatures above 60°C.

**Unsuitable Extinguishing Media:** Acid action on most metals may release hydrogen, a highly flammable and explosive gas.

**Protective Equipment:** Wear self-contained respiratory protective device, Wear fully protective suit.

### VI. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective equipment & emergency Procedures:**

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

**Environmental Precautions:** Do not allow undiluted product to enter sewer/surface or ground water

**Small Spill:** Small spills may be absorbed with non –reactive absorbent (sand) and placed in suitable covered labeled containers. Do not allow to enter waterways.

**Large Spill:** Move containers from spill area. May be absorbed with non –reactive absorbent (sand) and placed in suitable covered labeled containers. Do not allow to enter waterways. Check disposal regulations when disposing of large quantities.

### VII. STORAGE & HANDLING

**Storage:** Store in dry, cool, and well-ventilated area, and out of direct sunlight. Storage temperature should be between 41°F & 104°F (5°C & 40°C). Do not freeze.

**Handling:** No special handling required.

**Advice on General occupational hygiene:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

### VIII. EXPOSURE CONTROL / PERSONAL PROTECTION

**Components with limit values that require monitoring at the workplace:** The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**information:** The lists that were valid during the creation were used as basis.

**Exposure controls** Use local exhaust ventilation to control airborne concentrations below exposure limits.

**Hand protection:** Chemical-resistant, Impervious gloves should be worn always when handling chemical products.

**Body protection:** Personal protective equipment for the body should be selected based on the task being performed and the risk involved.

**Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection:** Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification.



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### IX. PHYSICAL / CHEMICAL PROPERTIES

Physical state:	Free-flowing liquid
Color:	Whiteish -Yellow
Odor:	Characteristic
Odor threshold:	Not determined
PH:	1.1 – 1.5 (1% dilution)
Melting point:	Not determined
Boiling point:	100°C (212°F)
Flash Point:	Not applicable
Evaporation rate:	Not determined
Flammability (solid, gas):	Not applicable
Lower and upper explosive:	Not determined
Vapor pressure at 20 °C:	23 hPa
Density at 20°C:	1.15 – 1.25 g/cm <sup>3</sup>
Relative density:	Not determined
Solubility in water:	Moderate – disperses in water
Partition coefficient: n-octanol/water:	Not determined
Organic solvents:	0.0%
Solvent contents - water:	45.0 -55.0%

### X. STABILITY & REACTIVITY INFORMATION

**Reactivity:** Reacts with Alkalis

**Chemical stability:** Stable under recommended storage conditions

**Possibility of hazardous reactions:** No dangerous reactions known

**Conditions to avoid:** No further relevant information available

**Incompatible materials:** Alkaline materials.

**Hazardous decompositions products:** Sulfur oxides (SO<sub>x</sub>), Carbon monoxide and carbon dioxide

### XI. TOXICOLOGICAL INFORMATION

#### Acute toxicity

LD/LC50 values that are relevant for classification:

#### 506-89-8 Organic Salt

Oral	LD50	1, 120.9 mg/kg (Rat)
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#### Primary irritant effect

**on the skin:** Caustic effect on skin and mucous membranes.

**on the eye:** Caustic effect. Strong irritant with the danger of eye injury.

**Sensitization:** No sensitizing effects known.

**Additional toxicological information:** The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Corrosive, Irritant, Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**Carcinogen:** No – IARC, NTP, OSHA

**Mutagen:** Not known to be a mutagen

### XII. ECOLOGICAL INFORMATION

#### Aquatic toxicity

#### 506-89-8 Organic Salt

LC50	71 Ceriodaphnia dubia) (48 Hours)
LC0	>142 mg/L (Oncorhynchus mykiss (rainbow trout)) (96 hours)

**Persistence and degradability:** Biodegradable

#### Behavior in environmental systems

**Bio accumulative potential:** No further relevant information available.

**Mobility in soil:** No further relevant information available.



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### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

### XIII. DISPOSAL INFORMATION

**Disposal Methods:** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should always comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirement of all authorities with jurisdiction. Waste packaging should be recycled.

### XIV. TRANSPORT CONSIDERATIONS

**Special precautions for user:** Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

	TDG Classification	DOT Classification	ADR/RID	IMDG	IATA
UN Number	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
Un proper shipping name	-	-	-	-	-
Transport Hazard Class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental Hazards	No	No	No	No	No

### XV. REGULATORY INFORMATION

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**TSCA (Toxic Substances Control Act) (Substances not listed):** All ingredients are listed.

#### Canadian lists

**Canadian NPRI:** None of the components are listed

**CEPA Toxic substance:** None of the components are listed

#### International regulations

**Chemical Weapon Convention List schedules I, II, & III Chemicals:** Not listed

**Montreal Protocol (Annexes A, B, C, E):** Not listed

**Stockholm Convention on Persistent Organic Pollutants:** Not listed

**Rotterdam Convention on Prior Informed Consent (PIC):** Not listed

**UNECE Aarhus Protocol on POPs and Heavy Metals:** Not listed

Fully complies with EPA Toxic Substance Control Act (TSCA) and the rules, orders and regulations promulgated there under including:

- Sections 4, 5, 6 & 7; Title 40 Chapter 1, 707.20 thru 707.75;
- 40 CFR Sections 704.3, 710.2(e) and 720.3(c); and
- Sections 5 and 13, reference 42FR64583
- Does not contain marine pollutants as defined in 49 CFR 171.8.

### XVI. OTHER INFORMATION

**Information sources:**

Suppliers SDSs, DSL, TSCA, EPA, IARC, NTP, OSHA.

**Prepared By:**

SDS Coordinator

**Date:**

February 15, 2018 - Last Rev: August 26, 2019

#### Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio accumulative and Toxic

vPvB: very Persistent and very Bio accumulative