

# SAFETY DATA SHEET

## ELS® Microemulsion

SDS # : ELS-C  
Revision date: 2021-10-14  
Format: NA  
Version 1.02



### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Product Identifier

**Product Name** ELS® Microemulsion

#### Recommended use of the chemical and restrictions on use

**Recommended Use:** Bioremediation product for the remediation of contaminated soil and groundwater

**Restrictions on Use** Use as recommended by the label: For groundwater treatment.

#### Manufacturer/Supplier

Evonik Active Oxygens, LLC  
2005 Market Street  
Suite 3200  
Philadelphia, PA 19103  
Phone: +1 267/ 422-2400 (General Information)  
E-Mail: Product-regulatory-services@evonik.com

#### Emergency telephone numbers

For leak, fire, spill or accident emergencies, call:  
1 800 / 424 9300 (CHEMTREC - U.S.A.)  
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)  
+1 303/ 389-1409 (Medical - U.S. - Call Collect)

**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This material is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

**GHS Label elements, including precautionary statements****EMERGENCY OVERVIEW****Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

CONTAINMENT HAZARD: Any vessel that contains wet ELS must be vented due to potential pressure build up from fermentation gases

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS-No	Weight %
Sorbitan monooleate, ethoxylated	9005-65-6	2-4
Lecithin	8002-43-5	20-30
Water	7732-18-5	60-80
Sodium Benzoate	532-32-1	2-4

**4. FIRST AID MEASURES**

<b>Eye Contact</b>	In case of contact, immediately flush eyes with plenty of water. Get medical attention if irritation develops and persists.
<b>Skin Contact</b>	Wash skin with soap and water. Get medical attention if irritation develops and persists.
<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapors. Consult a physician if necessary.
<b>Ingestion</b>	Drink 1 or 2 glasses of water. Get medical attention if symptoms occur. If swallowed, do not induce vomiting - seek medical advice. Never give anything by mouth to an unconscious person.
<b>Most important symptoms and effects, both acute and delayed</b>	None known.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	Treat symptomatically

**5. FIRE-FIGHTING MEASURES**

<b>Suitable Extinguishing Media</b>	Carbon dioxide (CO <sub>2</sub> ). Dry chemical. Dry powder.
<b>Specific Hazards Arising from the Chemical</b>	.
<b>Flammable properties</b>	Combustible material: may burn but does not ignite readily
<b><u>Explosion data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	For personal protection see Section 8.
<b>Other</b>	For further clean-up instructions, call PeroxyChem Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	No special environmental precautions required.
<b>Methods for Containment</b>	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	After cleaning, flush away traces with water.

**7. HANDLING AND STORAGE**

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Storage</b>	Any vessel that contains wet ELS must be vented due to potential pressure build up from fermentation gases. Keep away from open flames, hot surfaces and sources of ignition.
<b>Incompatible products</b>	Water, Alkalis

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

<b>Exposure Guidelines</b>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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**Appropriate engineering controls**

<b>Engineering measures</b>	None under normal use conditions.
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**Individual protection measures, such as personal protective equipment**

<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin and Body Protection</b>	Wear suitable protective clothing.
<b>Hand Protection</b>	Protective gloves

<b>Respiratory Protection</b>	Use only with adequate ventilation.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Appearance</b>	Light amber emulsion
<b>Physical State</b>	Liquid
<b>Color</b>	No information available
<b>Odor</b>	odorless
<b>Odor threshold</b>	No information available
<b>pH</b>	6.5 - 6.9
<b>Melting point/freezing point</b>	No information available No data available
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	> 200 °F
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Density</b>	No information available
<b>Specific gravity</b>	No information available
<b>Water solubility</b>	Dispersible in water
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	Not explosive
<b>Oxidizing properties</b>	Non-oxidizing
<b>Other Information</b>	
<b>Molecular weight</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Temperatures above 71°C.
<b>Incompatible materials</b>	Water, Alkalis.
<b>Hazardous Decomposition Products</b>	None under normal use.

**11. TOXICOLOGICAL INFORMATION****Product Information**

Ingredients in this product have been designated as GRAS (Generally Recognized as Safe) by government agencies.

**LD50 Oral** There are no data available for this product  
**LD50 Dermal** There are no data available for this product  
**LC50 Inhalation** No information available

**Sensitization** Not expected to be sensitizing based on the components.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation	NOAEL Oral Value
Sorbitan monooleate, ethoxylated (9005-65-6)	= 34500 µL/kg ( Rat )			
Water (7732-18-5)	> 90 mL/kg ( Rat )			
Sodium Benzoate (532-32-1)	= 4070 mg/kg ( Rat )			

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** Contains no ingredient listed as a carcinogen.

**Mutagenicity** No information available

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Ecotoxicity effects of component substances:

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to Microorganisms	Toxicity to daphnia and other aquatic invertebrates
Sodium Benzoate		96 h LC50: 420 - 558 mg/L (Pimephales promelas) flow-through 96 h LC50: > 100 mg/L (Pimephales promelas) static		48 h EC50: < 650 mg/L (Daphnia magna)

**Persistence and degradability**

Expected to biodegrade, based on component information.

**Bioaccumulation**

Bioaccumulation is unlikely.

**Mobility**

Will likely be mobile in the environment due to its water solubility but will likely degrade over time.

**Other Adverse Effects**

None known.

**13. DISPOSAL CONSIDERATIONS****Waste disposal methods**

Can be landfilled or incinerated, when in compliance with local regulations.

**Contaminated Packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. TRANSPORT INFORMATION****DOT**

NOT REGULATED

**15. REGULATORY INFORMATION****U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

This product is not subject to reporting under the Emergency Planning and Community Right-to-Know rule.

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40

CFR 122.42)

**CERCLA/EPCRA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****U.S. State Right-to-Know Regulations**

This product contains the following substances regulated under state Right-to-Know laws:

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**CANADA****Environmental Emergencies**

This product contains no substances listed under Canada's Environmental Emergency regulations.

**Canadian National Pollutant Release Inventory**

This product contains no substances reportable under Canada's National Pollutant Release Inventory regulations.

Chemical name	Canada - 2017 NPRI (National Pollutant Release Inventory)
Sodium Benzoate 532-32-1	Part 4 Substance

**International Inventories**

All ingredients are directly listed on the active TSCA Inventory

**Mexico****Mexico - Grade**

Minimum risk, Grade 0

**16. OTHER INFORMATION**

NFPA	Health Hazards 1	Flammability 0	Stability 0	Special Hazards -
HMIS	Health Hazards 1	Flammability 0	Physical hazard 0	Special precautions -

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Revision date: 2021-10-14  
Revision note: Manufacturer name changed.

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**End of Safety Data Sheet**