

## EarthZyme

### SECTION 1: IDENTIFICATION

Product Name:	EarthZyme
Synonyms:	EZ
CAS Number:	See Section 3
Product Use:	A water-based nonhazardous, environmentally friendly and biodegradable liquid used for soil stabilization.
Manufacturer/Supplier:	Cypher Environmental Ltd.
General Information:	WHMIS Classification: Not Controlled
Address:	Cypher Environmental Ltd. 1149 St. Matthews Ave. Winnipeg Manitoba R3G 0J8 Canada
Emergency Number:	Tel: (204)-489-1214 Fax: (204)489-7372

### Section 2: HAZARD IDENTIFICATION

Health Environmental Physical:	Biodegradable
Acute Toxicity:	Non- Toxic, pathogen free.
Skin/Eye Corrosion:	Contact with skin may result in mild irritation.
Mutagenicity/ Carcinogenicity/Devel opmental:	Non-mutagenic and non-carcinogenic None of the ingredients in EarthZyme are regulated nor listed as potential cancer agents by Federal OSHA, NTP or IARC.
Reproductive/Develop mental:	Not Determined
Target Organ Toxicity (Repeated):	Not Determined
Toxicity:	Non-Toxic, pathogen free

GHS Label:


**DANGER!**

Signal Word:

Hazard Statements:

WHMIS HAZARD RATING INFORMATION	FLAMMABILITY	HEALTH	REACTIVITY
0-Minimal 1-Slight 2-Moderate 3-Serious 4-Severe	0	1	0

**Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**

Unique Identifiers

INGREDIENTS	%	CAS NO.
Water	21.06	7732-18-5
Non-ionic Surfactants	55	68131-39-5 103818-93-5 68551-13-3 68439-46-3
Polysaccharides	2	9005-25-8
Oligosaccharides	3	9004-53-9
Disaccharides	5	57-50-1 69-79-4 63-42-3
Monosaccharaides	8	50-99-7 57-48-7 59-23-4 50-70-4
Lactic Acid	3.5	50-21-5
Potassium as the chloride	1.2	7447-40-7
Aluminum as the sulphate	0.04	10043-01-3
Magnesium as the sulphate	1.2	10034-99-8
Total	100%	

**Section 4: FIRST AID MEASURES**

Eye:	A slight eye irritant.
Skin:	Contact with skin may result in mild irritation.
Inhalation and Ingestion:	Considered non-harmful by all exposure routs.
Signs and Symptoms of Exposure:	None. Ingestion may cause mild nausea or diarrhea.

**Section 5: FIRE FIGHTING MEASURES**

Suitable Extinguisher Media:	Treat the same as water
Fire Fighting Procedures:	Isolate fire area and deny unnecessary entry, Soak thoroughly with water to cool and prevent re ignition. Cool surroundings with water to localize fire zone. Hand held carbon dioxide or dry chemical hazard may result from forceful application of fire extinguishing agents.

**Section 6: ACCIDENTAL RELEASE MEASURES**

PPE:	Eye: Safety goggles Respirator: Not applicable Clothing: Regular on-Site clothing
Emergency Procedures:	In case of accidental spill or discharge, take up and containerize for disposal according to state and local regulations. This product displays ultimate biodegradability under both aerobic and anaerobic conditions and if spilled should not cause any adverse short or long term environmental impacts. Ventilation requirements as normal
Methods and Materials For Containment and Cleaning Up:	For smaller spills, Wash contaminated area with water and flush into sewage system or any other disposal system. For large spills, soak up with sand or sweeping compound and dispose at solid waste

**Section 7: HANDLING AND STORAGE**

Handling:	<b>Keep container closed when not in use.</b>
Storage:	<b>Storage Temperature (Degrees C/F)</b> Minimum: 10°C (50°F) Maximum: 30°C (86°F) <b>Application Temperature:</b> Minimum: 10°C (50°F) Maximum: 57°C (135°F) <b>Optimum Working Temperature Range:</b> 18-45°C (64-113°F)

**Section 8: EXPOSURE TO CONTROLS AND PERSONAL PROTECTION**

OSHA PEL's:	Not Applicable
Exposure Limits:	EarthZyme presents no health hazards to the user, other than mild eye and skin irritancy.
Engineering Controls:	No specific engineering controls needed, it is recommended to handle concentrated product in a well ventilated area
PPE:	
Eye Protection:	Safety goggles, avoid eye contact or exposure to concentrated amounts of product
Skin Protection:	Regular on-Site clothing , rinse from skin when exposed to product
Respiratory Protection:	Respirator: Not applicable, ventilation as normal

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

Flashpoint:	Not flammable; not combustible
Auto Ignition:	None
Boiling Point:	>100°C
Melting Point:	Liquid
Freezing Point:	<0°C
Vapor Pressure:	As for water
Miscibility with water:	Miscible in all proportions
Solubility in Water:	Soluble
Lower and Upper Flammability Limits:	Not flammable
Specific Gravity:	1.24 @ 25 °
Density:	1.19g/cm <sup>2</sup> @ 25 °
pH:	3 to 6
Ultimate Biodegradability:	DOC reduction >90% after 28 days

Appearance:	Pale green/brown slightly viscous liquid
Odor:	Herbal scent
Composition:	A blend of fermented carbohydrates, inorganic salts and surfactants

**Section 10: STABILITY AND REACTIVITY**

Stability/ Incompatibility:	Stable for a minimum of two years when stored in proper conditions (see above section 7)
Hazardous Reactions/Decomposition Products Reactivity:	Not determined
Chemical Stability:	Stable
Conditions To Avoid:	Storage above 50°C (120°F) or below 0°C (32°F). Avoid contact with strong oxidizing and reducing agents.
Incompatible Materials:	None
Hazardous Decomposition Products:	Not determined, None

**Section 11: TOXICOLOGICAL INFORMATION**

Signs, Symptoms of Over Exposure and First Aid Treatment:	<p>Eye Contact: Reddening may develop. Immediately rinse the eye with large quantities of cool water. Continue 10-15 minutes or until material has been removed. Be sure to remove contact lenses, if present, and lift upper and lower lids during rinsing. Get medical attention if irritation persists.</p> <p>Skin Contact: Minimal effects, if any. Rinse skin with water. Rinse shoes and launder clothing before reuse.</p> <p>Swallowing: Essentially non-toxic. Product may cause a slight laxative condition. Give several glasses of water to dilute if swallowed. Do not induce vomiting. If stomach upset persists, consult a physician.</p> <p>Inhalation: Non-toxic. Prolonged exposure to product in a mist form (not recommended) could cause a mild irritation of the nasal passages and throat. Remove to get fresh air. Get medical attention if irritation persists.</p>
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**Section 12: ECOLOGICAL INFORMATION**Bio Accumulative  
Potential:

The product exhibits ultimate biodegradability under anaerobic conditions as defined by US EPA methods (40 CFR part 796.3180).

**Section 13: DISPOSAL CONSIDERATIONS**

See section 6

**Section 14: TRANSPORTATION INFORMATION**

This product is non-toxic, transport in conditions described in section 7 above.

**INTERNATIONAL AIR TRANSPORTATION ASSOCIATION:** this product is not regulated by IATA, when shipped internationally.**Section 15: REGULATORY INFORMATION****SARA/TITLE III – CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 304.4):** This product **does not** contain an ingredient(s) listed as a hazardous ingredient for Emergency Release Notification under section 304.**SARA/TITLE III – List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 300 & 305):** This product **does not** contain an ingredient(s) listed as an extremely hazardous substance (EHS) for Emergency Planning under sections 301-303 and for Emergency Release Notification under section 304.**SARA/TITLE III – List of Toxic Chemical subject to Release Reporting (Community Right to Know) (40 CFR 372):** This product **does not** contain an ingredient(s) listed as a toxic chemical for Annual Release Reporting Requirements under section 313.**Section 16: OTHER INFORMATION**

Date of SDS September 2015

Preparation:

Original or Revised  
Copy:

Last Updated August 2015

**Reasonable care has been taken to ensure information and advice contained in this data sheet is accurate at the time of printing. However, Cypher Environmental Ltd. Accepts no liability for any loss or damages suffered as a consequence of reliance on the information contained herein.**Changes Made to  
Original SDS:

Disclaimers:

Please contact the supplier for application instructions, the application rate/procedure may fluctuate depending on specific uses of product and applications.

**The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.**

