SAFETY DATA SHEET – U.S. DEPARTMENT OF LABOR

May be used to comply with Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200, Standard must be consulted for specific requirements (non-mandatory form) Form Approved OMB No. 1218-0072

Date Prepared: 05-15-15 Date Revised: 07-23-2019

Section 1: Identification of the Substance/Preparation and of the Company/Undertaking

1.1 Product Identifier

Trade Name: SoilBiotics CAL – 10 (for conventional use)

Synonyms:

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against It

Recommended Uses: Agricultural Applications

Inadvisable Uses:

Details of the Distributor of the Safety Data Sheet

Distributed By: SoilBiotics
2902 West State Route 17
Kankakee, Il 60901
(815) 929-1752
Country: United States

1.3 In Case of Emergency: Infotrac at 800-535-5053

Section 2: Hazards Identification

2.1 EPA Hazardous Substance: Yes

Warning **WILL IRRITATE SKIN**
WILL IRRITATE EYES

Precautionary Statements:

- If Contact with Skin: Wear protective face shield and gloves. Wash with soap and water – Remove contaminated clothing. Wash thoroughly after handling.
- If Contact with Eyes: Wear protective safety glasses. Carefully remove contact lenses. Flush with water for at least 15 minutes
- If Any Irritations Persists: Seek medical attention
- See Section 4 for First Aid Information.

Section 3: Composition/Information on Ingredients

3.2 Mixtures

Substance	CAS No	EC No	REACH Reg No	Concentration	Notes	DSD-Classification	CLP - Classification	
Proprietary								

Please see Section 16 for the full text of R-Phrases and H-Phrases

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact: Remove contact lenses if present and flush eyes with water for at least 15 minutes
Skin Contact: Remove contaminated clothing. Wash the skin thoroughly with soap and rinse with lots of water.
Inhalation: Remove from source of exposure to fresh air.
Ingestion: Rinse mouth very well.

4.2 Seek medical attention if symptoms or irritation persists.
4.3 Note to Physician: Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomit may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
4.4 Medical Conditions aggravated by Exposure: Any skin condition that disrupts the skin, such as abrasions, cuts, psoriasis, fungal infections, etc. Any eye condition that compromises tear production, conjunctiva, or normal corneal homeostasis.

Section 5: Fire-Fighting Measures

5.1 Special Fire Fighting Procedures: None
5.2 Fire and Explosion Hazards: Does not burn
5.3 Suitable Extinguishing Media: Extinguishing agents appropriate for surrounding fire. Water in large quantities as fine spray. As with any chemical wear chemical resistant fire-fighting clothing with self-contained breathing apparatus.
5.4 Unsuitable Extinguishing Media: None
5.5 Hazardous Combustion Products: Formed under fire conditions: hydrogen chloride gas, calcium oxide

Section 6: Accidental Release Measures

6.1 Personal Precautions: Use personal protection recommended in Section 8.
6.2 EPA Hazardous Substance: No
6.3 Methods for Containment: Stop leak. Use berms, dikes, absorbent material and drain covers.
6.4 Methods for clean up: Mechanically collect and remove spilled material. Area may be washed with water. Product may be absorbed with sand.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling: Avoid contact with eyes, skin, clothing. Do not swallow. Wash thoroughly after handing. Wear personal protective equipment as described in Section 8.
7.2 Storage: Recommended that product not be subject to freezing. Keep containers closed when not in use. Keep separated from incompatible substances. See Section 10.
7.3 RCRA Status of Unused Material: Not a "Hazardous Waste"

Section 8: Exposure Controls/Personal Protection

8.1 Threshold Limit Values: OSHA PEL: None established yet
8.2 Exposure Controls: Adequate ventilation for comfort is recommended.
8.3 Personal Protective Equipment:

Respiratory Protection: Wear when there is potential to exceed exposure, when adverse effects, respiratory irritation or discomfort has been experienced.
Hand Protection: Use chemical resistant gloves.
Eye and Face Protection: Safety glasses with side shields. Chemical safety goggles and or face shield.
Skin Protection: Wear clean, body covering clothing. Wear appropriate clothing to avoid skin contact.

Section 9: Physical and Chemical Properties

9.1 Physical State/Appearance/Odor: Liquid, Dark Brown Golden Brown, smells of mild molasses

9.2 Information on Basic Physical and Chemical Properties:

Parameter	Value/Unit	Remark
pH	5.0-5.4	
Melting Point		Not Applicable
Initial Boiling Point	110-112 C/230-252 F	
Freezing Point	0C/32F	
Flash Point		Not Flammable
Evaporation Rate		Not Applicable
Flammability Limits in Air (% by vol.)		Not Applicable
Vapor Pressure (mmHg at 77F)	7-15 mm Hg @ 25 C/77 F	
Vapor Density (Air – 1)		No data available
Specific Gravity (H_2O = 1)	1.275-1.439 @ 25 C/77 F	
Partition Coefficient N-Octonol/Water		Not Applicable
Auto-Ignition Temperature		Not Applicable
% Volatiles by Volume		Not Applicable
Bulk Density (g/ml)		Not Applicable
Dry Matter, %		None Applicable
Solubility in Water	Completely miscible	

Section 10: Stability and Reactivity

10.1 Chemical Stability: Stable at normal temperatures and pressures
10.1a: Reactivity: Hygroscopic
10.2 Incompatible Materials: bromide trifluoride, 2-furan percarboxylic acid. Contact with zinc forms flammable hydrogen gas which can be explosive, catalyzes exothermic polymerization of methyl vinyl ether, may release flammable hydrogen gas, reaction of bromide impurity with oxidizing materials may generate trace levels of impurities such as bromates.
10.3 Hazardous Decomposition Products: Does not decompose

10.4 Hazardous Polymerization: Will Not Occur
10.5 Conditions to Avoid: None Known

Section 11: Toxicological Information

11.1 Acute (Single Exposure) Toxic Tests, Product/Similar Product
Permissible Concentration References: None established by OSHA
11.2 Potential Health Effects:
EYE: May cause eye irritation. May cause slight corneal injury. Effects may be slow to heal.
SKIN: Brief contact is essentially nonirritating. Prolonged contact may cause irritation, even a burn. May cause more severe response is skin is damp, abraded or covered by clothing, gloves, footwear. Not classified as corrosive to skin.
INHALATION: Vapors are unlikely. Mist may cause irritation to upper respiratory tract (nose/throat)
INGESTION: Lox toxicity if swallowed. Small amounts not likely to cause injury however swallowing larger amounts may. Swallowing may result in gastrointestinal irritation of ulceration.
Chronic Effects: Chronic dermatitis or mucosal membrane problem. Effects may be seen in gastrointestinal tract, heart, kidney, elevated blood pressure, prolonged dietary overuse
Signs and Symptoms of Exposure: Solution and or solids may be visible on the skin or eyes. Localized redness, warmth, irritation with mechanism of injury – abrasion, burn, hypertonic solution
Inhalation (Breathing): inhaling mist, spray or vapor may cause irritation to upper respiratory tract (nose and throat). Nasal mucosal and oropharyngeal erythema.
Skin: Skin exposure may cause light irritation, redness, itching, swelling. May cause more severe response is skin is damp, abraded, covered by clothing, gloves or footwear. Prolonged exposure may cause more severe symptoms. Damage is localized to contact areas.
Eye: Eye exposure may cause serious eye irritation and pain. May cause conjunctival swelling and cornea opacification from hypertonic solution. Corneal eye pain, redness, acute corneal thickening or whitening.
Ingestion (Swallowing): Consumption of solids or hypertonic solutions cases nausea, vomiting and increased thirst.
Interaction with other chemicals which enhance toxicity: None known

Section 12: Ecological Information

Product/Similar Product
12.1 Biological Oxygen Demand (BOD): Not known
12.2 Chemical Oxygen Demand (COD): Not known

Based largely or completely on data for major component(s). Material is practically non-toxic to aquatic Organisms on the acute basis (LC50 greater than 100 mg/L in most sensitive species).

Section 13: Disposal Considerations

13.1 Waste Treatments Methods: This product is not to be considered Hazardous Waste.
Dispose of in accordance with Local Authority requirements.

Section 14: Transport Information

14.1 UN-No:
14.2 UN Proper Shipping Name: DOT - Class 50
14.3 Transport Hazard Class(es): DOT – Non-Regulated
14.4 Transport Hazard Class(es): IATA – Non-Regulated
14.5 Packaging Group: Not applicable
14.6 EU Classified as Dangerous Goods:
14.7 Harmonized Tariff Code for US:

Section 15: Regulatory Information

Regulatory Information (Not meant to be all-inclusive – selected regulations represented)

15.1 The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial and local laws and regulations. The following specific information is made for the purpose of complying with numerous federal, state or provincial and local laws and regulations. See other sections for health and safety information.

Section 16: Other Information

16.1 HMIS Rating (0-4): Health=1 Fire=0 Reactivity=0 Special=0

Prepared by: SoilBiotics

The information and recommendations contained herein are offered as a service to our customers but are not intended to relieve the user from its responsibility to investigate and understand pertinent sources of information and to comply with all laws and procedures applicable to the safe handling and use of these materials. The information and recommendations proved herein were believed by SoilBiotics to be accurate at the time of preparation or obtained from sources believed to be generally reliable. However, SoilBiotics makes no warranty concerning their accuracy and SoilBiotics will not be liable for claims relating to any party's use of reliance on information or recommendations contained herein, regardless of whether it is claimed that the information or recommendations are inaccurate, incomplete or otherwise misleading.