

Material Safety Data Sheet

Product: Revive Organic Soil Treatment

MSDS Date: 1-23-04
Product Name: Revive Organic Soil Treatment
Manufacturer: Revive, Inc.

I. Product and Company Description

Revive, Inc.
7535 Hilltop Circle #100
Denver, CO 80221

Product Information/Emergency Phone Number:
303-426-0373

Product Use:
Soil Treatment

Chemical Name or Synonym:
Aqueous Mixture

Molecular Formula:
NA

II. Chemical Composition

Component	CAS#	%Composition
Proprietary Component A	Trade Secret	>1
Lignosulfonate	8061-52-6	>1
Ferrous Sulfate	7720-78-7	>1
Proprietary Component B	Trade Secret	<1
Proprietary Component C	Trade Secret	<1
Water	7732-18-5	Balance

III. Hazards Identification

A. Emergency Overview:

Physical Appearance and Odor:
Dark, reddish-brown liquid with a pleasant odor.

B. Potential Health Effects:

Acute Eye:
May cause irritation.

Acute Skin:
May cause irritation including skin sensitization and other skin reaction.

Acute Inhalation:
May cause irritation to the respiratory tract and mucous membranes.

Material Safety Data Sheet

Product: Revive Organic Soil Treatment

Acute ingestion:

None expected under anticipated use conditions. If ingested may cause vomiting, diarrhea, and intestinal distention.

Chronic effects:

ND

IV. First Aid Measures

First Aid Measures for Accidental Exposure:

Eye Exposure:

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

Skin Exposure:

Remove contaminated clothing and shoes immediately. Wash affected area with soap and water. Get medical attention if irritation develops or persists.

Inhalation:

Remove to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion:

Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention.

V. Fire Fighting Measures

Fire Hazard Data:

Flash Point: ND

Method Used: ND

Ignition Temperature: ND

Flammability Limits (vol/vol%): Lower: ND Upper: ND

Extinguishing Media:

Halon, Water spray, Dry extinguisher, foam or CO2

Special Fire Fighting Procedures:

Move containers from fire areas if possible. Do not scatter spilled material with high pressure water streams. Contain fire control water for later disposal.

Unusual Fire and Explosion Hazards:

None

Hazardous Decomposition Materials (Under Fire Conditions):

Combustion produces toxic and/or hazardous gases.

Material Safety Data Sheet

Product: Revive Organic Soil Treatment

VI. Accidental Release Measures

Cleanup and Disposal of Spill:

Wearing proper personal protective equipment (Section VIII), stop the leak, if possible. For small spills, absorb using sand or other material and place into clean, dry containers for later disposal. Isolate hazard area and keep unnecessary personnel away.

Dispose of materials according to the applicable Federal, State, or local regulations.

VII. Handling and Storage

Handling:

Use with adequate ventilation. Avoid inhalation, and contact with eyes or skin.

Storage:

Store in a well-ventilated, dry place. Keep containers closed. Avoid excessive heat and ignition sources.

VIII. Exposure Controls / Personal Protection

Exposure Guidelines:

Component	Exposure limits		
	ACGIH	NIOSH	OSHA-PELs
Proprietary Component A	ND	ND	ND
Lignosulfonate	ND	ND	ND
Ferrous Sulfate	1 mg/m ³ TWA	ND	ND
Proprietary Component B	ND	ND	ND
Proprietary Component C	ND	ND	ND
Water	NA	NA	NA

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH approved respirator when necessary.

Eye / Face Protection:

Not required under normal use conditions, however if splashing is likely use safety glasses, etc.

Skin Protection:

Chemical resistant gloves recommended, such as neoprene or nitrile rubber.

IX. Physical and Chemical Properties

Physical Appearance: Dark, reddish-brown liquid

Odor: Pleasant

pH: ND

Specific Gravity: 1.0344

Material Safety Data Sheet

Product: Revive Organic Soil Treatment

Water Solubility:	soluble
Melting Point Range:	NA
Boiling Point Range:	100°C (212°F)
Vapor Pressure:	ND
Density:	ND
Percent Volatile:	ND
Evaporation Rate:	<1

X. Stability and Reactivity

Chemical Stability:

Stable under standard use and storage conditions.

Conditions to Avoid:

Keep away from heat, ignition sources, and electrostatic discharge.

Materials / Chemicals to be Avoided:

Strong oxidizing agents.

Hazardous Decomposition Products:

Toxic and/or hazardous gases.

Hazardous Polymerization:

Should not occur

XI. Toxicological Information

The toxicological properties for the product as a whole have not been determined; the following are for the individual components only.

Acute Oral Toxicity:

For Proprietary Component A: LD50: 3 g/kg (rat)

For Ferrous Sulfate: LD50: 319 mg/kg (rat)

Acute Dermal Toxicity:

For Proprietary Component A: LD50: 3.0 g/kg (rabbit)

Acute Inhalation Toxicity:

ND

Chronic Toxicity:

ND

XII. Ecological Information

Ecotoxicological Information:

Degradation: Not Determined

Material Safety Data Sheet

Product: Revive Organic Soil Treatment

Accumulation: Not Determined
Fish-Toxicity: Not Determined

Chemical Fate Information:
Not Determined

XIII. Disposal Considerations

Waste Disposal Method:

Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

Container Handling and Disposal:

Dispose of container and unused contents in accordance with federal, state, and local regulations.

XIV. Transportation Information

US Department of Transportation Shipping Name:

US Department of Transportation	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packaging Group	Not Regulated

XV. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard: NO
Reactive Hazard: NO
Release of Pressure: NO
Acute Health Hazard: NO
Chronic Health Hazard: NO

SARA Section References:

Section 302 (RQ)
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this material have a TPQ.
Section 313
None

Toxic Substances Control Act (TSCA): All components are included in the inventory or are not required to be listed.

Other Regulations:

State:

The components identified with an X are present on the respective state's Right To Know lists:

Component	MA	PA	MI	NJ	IL
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Material Safety Data Sheet

Product: Revive Organic Soil Treatment

Component	MA	PA	MI	NJ	IL
Proprietary Component A					
Lignosulfonate					
Ferrous Sulfate					
Proprietary Component B					
Proprietary Component C					
Water					

California Prop. 65: None of the chemicals in this product are listed.

XVI. Other Information

National Fire Protection Association Hazard Ratings – NFPA(R):

Health Hazard: 0
Flammability: 0
Reactivity: 0

Key Legend Information:

N/A – Not Applicable

ND – Not Determined

ACGIH – American Conference of Governmental Industrial Hygienists

OSHA – Occupational Safety and Health Administration

TLV – Threshold Limit Value

PEL – Permissible Exposure Limit

TWA – Time Weighted Average

STEL – Short Term Exposure Limit

NTP – National Toxicology Program

IARC – International Agency for Research on Cancer

The information contained herein is based on the data available to us and is believed to be correct. However Revive, Inc. makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.