

# SAFETY DATA SHEET



Issuing Date 04-Dec-2014

Revision Date 27-Feb-2015

Revision Number 0

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### GHS product identifier

Product Name Restore

### Other means of identification

Synonyms None

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

Recommended Use For the treatment of contained organic wastes from food processing or other agricultural wastes

Uses advised against No information available

### Supplier's details

#### Supplier Address

Solutions 4Earth  
931 American Pacific Drive, #104  
Henderson, NV  
89014  
TEL: 702-315-5121

### Emergency telephone number

Emergency Telephone Number Chemtrec – 24 hour within US and Canada 1-800-424-9300  
24 hour international 1-703-527-3887  
Solutions 4Earth 8am – 5pm Pacific time 702-315-5121 or 702-278-5903

## 2. HAZARDS IDENTIFICATION


### Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1

### GHS Label elements, including precautionary statements

### Emergency Overview

<b>Signal Word</b> <b>Hazard Statements</b> <ul style="list-style-type: none"><li>• Harmful if swallowed</li><li>• Causes severe skin burns and eye damage</li></ul> 	<b>Danger</b>		
<b>Appearance</b> Hazy off-white to light brown	<b>Physical State</b> Liquid.	<b>Odor</b> Slight sulfur	

**Precautionary Statements****Prevention**

- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wear protective gloves/protective clothing/eye protection/face protection.

**General Advice**

- Immediately call a POISON CENTER or doctor/physician.
- Specific treatment (see supplemental instructions on the administration of antidotes on this label)

**Eyes**

- 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 or doctor/physician.

**Skin**

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash contaminated clothing before reuse.

**Inhalation**

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Ingestion**

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.
- Do NOT induce vomiting.

**Storage**

- Store locked up.

**Disposal**

- Dispose of contents/container to an approved waste disposal plant.

**Hazard Not Otherwise Classified (HNOC)**

Not applicable

**Other information**

8.2% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Trade Secret	Proprietary	0 - 10%
Trade Secret	Proprietary	0 - 10%

### 4. FIRST AID MEASURES

#### Description of necessary first-aid measures

<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary

#### Most important symptoms/effects, acute and delayed

**Most Important Symptoms/Effects** No information available.

#### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to Physician** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

#### Specific Hazards Arising from the Chemical

No information available.

#### Explosion Data

<b>Sensitivity to Mechanical Impact</b>	None.
<b>Sensitivity to Static Discharge</b>	None.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Attention! Corrosive material. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation. In case of insufficient ventilation wear suitable respiratory equipment.

#### Environmental Precautions

**Environmental Precautions** See Section 12 for additional Ecological Information. Avoid release to the environment. Dispose of contents/container to an approved waste disposal plant.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Absorb with sand or kitty litter. The material does contain bacteria, so treat with bleach or biocide to inactivate the bacteria. Pick up and transfer to properly labeled containers.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Do not take internally. Wash thoroughly after handling. This product is corrosive to soft steel. Equipment should be resistant to acidic materials such as PVC or stainless steel. Rinse thoroughly with clean water after every use. Do not store diluted product in equipment tanks.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep container tightly closed. Keep away from incompatible materials. Keep tightly closed in a dry and cool place. Keep from freezing.

**Incompatible Products** Strong oxidizing agents. Bases. Strong reducing agents.

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

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Trade Secret	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Safety glasses with side-shields. If splashes are likely to occur, wear: Chemical splash goggles.

**Skin and Body Protection** Impervious clothing. Impervious gloves.

**Respiratory Protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Appearance</b>	Hazy off-white to light brown
<b>Odor</b>	Slight sulfur	<b>Odor Threshold</b>	No information available
<b>Property</b>	<b>Values</b>	<b>Remarks/ - Method</b>	
<b>pH</b>	1.2 - 1.5	None known	
<b>Melting Point/Range</b>	No data available	None known	
<b>Boiling Point/Boiling Range</b>	No data available	None known	
<b>Flash Point</b>	No data available	None known	
<b>Evaporation rate</b>	No data available	None known	
<b>Flammability (solid, gas)</b>	No data available	None known	
<b>Flammability Limits in Air</b>			
upper flammability limit	No data available		
lower flammability limit	No data available		
<b>Vapor Pressure</b>	No data available	None known	
<b>Vapor Density</b>	No data available	None known	
<b>Specific Gravity</b>	10.6 Lbs./Gal. at 20°C	None known	
<b>Water Solubility</b>	Soluble in water.	None known	
<b>Solubility in other solvents</b>	No data available	None known	
<b>Partition coefficient: n-octanol/water</b>	No data available	None known	
<b>Autoignition Temperature</b>	No data available	None known	
<b>Decomposition Temperature</b>	No data available	None known	
<b>Viscosity</b>	No data available	None known	
<b>Flammable Properties</b>	Not flammable		
<b>Explosive Properties</b>	No data available		
<b>Oxidizing Properties</b>	No data available		
<b><u>Other information</u></b>			
<b>VOC Content (%)</b>	No data available		

## 10. STABILITY AND REACTIVITY

### **Reactivity**

No data available.

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of hazardous reactions**

None under normal processing.

### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### **Conditions to avoid**

Incompatible products.

### **Incompatible materials**

Strong oxidizing agents. Bases. Strong reducing agents.

### **Hazardous decomposition products**

Carbon oxides. Nitrogen. Toxic phosphorous compounds.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye Contact</b>	Causes serious eye damage. Corrosive to the eyes and may cause severe damage including blindness. Eye contact with corrosive substances can cause eye burns.
<b>Skin Contact</b>	Corrosive. Causes severe skin burns.
<b>Ingestion</b>	May be harmful if swallowed. Ingestion of corrosive substances can cause burns of the upper digestive and respiratory tract.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trade Secret	= 350 mg/kg ( Rat )	> 2 g/kg ( Rabbit )	-
Trade Secret	= 8471 mg/kg ( Rat )	-	-
Trade Secret	8000 mg/kg	-	-
Trade Secret	29700 mg/kg ( Rat )	-	-
Trade Secret	> 2560 mg/kg ( Rat )	-	-
Trade Secret	= 5750 mg/kg ( Rat )	> 7940 mg/kg ( Rabbit )	-
Trade Secret	= 2000 mg/kg ( Rat )	-	-
Trade Secret	> 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	> 2.05 g/m <sup>3</sup> ( Rat ) 4 h

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Sensitization** No information available.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** Contains no ingredients above reportable quantities listed as a carcinogen.

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Aspiration Hazard** No information available.

### Numerical measures of toxicity - Product

**Acute Toxicity** 8.2% of the mixture consists of ingredient(s) of unknown toxicity.

*The following values are calculated based on chapter 3.1 of the GHS document:*

**LD50 Oral** 1599 mg/kg; Acute toxicity estimate  
**LD50 Dermal** 5246 mg/kg; Acute toxicity estimate

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Trade Secret		LC50: 16200-18300 mg/L Poecilia reticulata 96 h	EC50 = 23914 mg/L 5 min	EC50 48 h: = 3910 mg/L Static (Daphnia magna) EC50 24 h: > 10000 mg/L (Daphnia magna Straus)

Trade Secret		LC50 96 h: 123-128 mg/L semi-static (Poecilia reticulata) LC50 96 h: 32.2-41.9 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: 460 - 1000 mg/L static (Leuciscus idus) LC50 96 h: 5.2-8.2 mg/L static (Oncorhynchus mykiss) LC50 96 h: = 126 mg/L (Poecilia reticulata) LC50 96 h: = 18 mg/L (Cyprinus carpio) LC50 96 h: = 250 mg/L (Brachydanio rerio) LC50 96 h: = 420 mg/L semi-static (Brachydanio rerio) LC50 96 h: = 480 mg/L flow-through (Brachydanio rerio) LC50 96 h: > 100 mg/L (Pimephales promelas)		LC50 48 h: = 14 mg/L (Daphnia magna) EC50 24 h: = 423 mg/L (Daphnia magna)
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**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

**Other Adverse Effects**  
No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods** Dispose of in accordance with federal, state, and local regulations

**Contaminated Packaging** Do not re-use empty containers.

**14. TRANSPORT INFORMATION**

**Note:** Product not regulated for ground transport in the USA per exception permitted in 49 CFR 173.154 (d).

**DOT** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

**Legend**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

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

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

### 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

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.

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Trade Secret	-	X	X	-	X

### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

## 16. OTHER INFORMATION

<u>NFPA</u>	Health Hazard	3	Flammability	0	Instability	0	Physical and Chemical Hazards	-
<u>HMIS</u>	Health Hazard	3	Flammability	0	Physical Hazard	0	Personal Protection	X

Prepared By Product Stewardship  
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1-800-572-6501

Issuing Date 04-Dec-2014  
Revision Date 04-Dec-2014  
Revision Note Initial Release.

### General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**