

#### 1. Identification

Product identifier Gravity® L Micro with Max-In Technology

Other means of identification

None.

Recommended use

Turf- fertilizer

Recommended restrictions

Refer to product label.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name

Heritage Landscape Supply Group

Address

7440 TX-121

McKinney, TX 75070United States

wording, 17 7507601110d Oldi

Non-Emergency Phone Number 1-855-565-1507 Mon - Fri 8am - 5pm (Central Standard Time)

**Emergency phone numbers** 

CHEMTREC (24 hours) (For Emergency, Spill, Leak, Fire, Exposure, or

Accident):

USA 1-800-424-9300

**MEDICAL EMERGENCY TELEPHONE NUMBER:** 

1-866-767-5042 (24hrs)

# 2. Hazard(s) identification

Physical hazards

Not classified.

Health hazards

Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Reproductive toxicity Category 2

Environmental hazards
OSHA defined hazards

Not classified. Not classified.

Label elements





Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. Suspected of damaging fertility or the unborn

child.

**Precautionary statement** 

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye

protection/face protection.

Response

If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

# 3. Composition/information on ingredients

### **Mixtures**



Chemical name	Common name and synonyms	CAS number	%
Zinc Sulfate		7733-02-0	10 - < 20*
DI-malic Acid		6915-15-7	3 - < 5*
Manganese Sulfate, monohydra	te	10034-96-5	1 - < 3*
Disodium Octaborate Tetrahydra	ate	12008-41-2	< 0.2*

Other components below reportable levels

70 - < 80

### 4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and

symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in

attendance.

# 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from**During fire, gases hazardous to health may be formed.

the chemical

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions

Move containers from fire area if you can do so without risk.

Specific methods
General fire hazards

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

Material name: Gravity L Micro Issue date: 1-26-2023

**Environmental precautions** 



# 7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in tightly closed container. Store away from incompatible materials (see

Section 10 of the SDS).

# 8. Exposure controls/personal protection

### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA	Table Z-1	Limits for	Air	Contaminants	(29 CFR	1910.1000)

Components	Туре	Value	
Manganese Sulfate, monohydrate (CAS 10034-96-5)	Ceiling	5 mg/m3	

#### **US. ACGIH Threshold Limit Values**

Components	Туре	Value	Form
Disodium Octaborate Tetrahydrate (CAS 12008-41-2)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
Manganese Sulfate, monohydrate (CAS 10034-96-5)	TWA	0.1 mg/m3	Inhalable fraction.

0.02 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to C Components	hemical Hazards Type	Value	Form	
Manganese Sulfate, monohydrate (CAS	STEL	3 mg/m3	Fume.	
10034-96-5)	TWA	1 mg/m3	Fume.	

**Biological limit values** No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety

shower.

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

**Eye/face protection** Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**Chemical respirator with organic vapor cartridge and full facepiece. **Thermal hazards**Wear appropriate thermal protective clothing, when necessary.

Ganaral hygiana Observa any medical surveillance requirements. Always obs

General hygiene Observe any medical surveillance requirements. Always observe good personal hygiene considerations measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.



# 9. Physical and chemical properties



**Appearance** 

Physical state Liquid

Form Liquid
Color Brown
Odor Not available.

Odor threshold Not available.

**pH** 1.7

Melting point/freezing point Not available.

Initial boiling point and boiling Not available.

range

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 0.00001 hPa estimated

Vapor density Not available.

Relative density 1.258 g/cm3 (typical)

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

**Explosive properties** Not explosive. **Oxidizing properties** Not oxidizing.

Percent volatile 87.08 % estimated
Pounds per gallon 10.5 lb/gal (typical)
VOC 2.97 % estimated

# 10. Stability and reactivity

Reactivity products

**Chemical stability** 

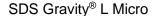
Possibility of hazardous

reactions

Conditions to avoid Incompatible materials Hazardous decomposition

Material name: Gravity L Micro

Issue date: 1-26-2023





Reacts violently with Material is stable under normal conditions.

strong alkaline No dangerous reaction known under conditions of normal use.

substances. This

product may react with Contact with incompatible materials. Do not mix with other chemicals.

reducing agents. Bases. Reducing agents.

No hazardous decomposition products are known.

# 11. Toxicological information

## Information on likely routes of exposure

**Inhalation** Prolonged inhalation may be harmful.

**Skin contact** Causes skin irritation.

**Eye contact** Causes serious eye irritation.

**Ingestion** Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Skin irritation. May cause redness and pain.

# Information on toxicological effects



Acute toxicity Not known.

Product Species Test Results

Gravity 0-0-0 plus MaxIn

Acute Dermal

LD50 Rat 70280 mg/kg

Inhalation

LD50 Rat 21690 mg/l, 4 hours

Oral

LD50 Rat 19270 mg/kg

Components Species Test Results

Disodium Octaborate Tetrahydrate (CAS 12008-41-2)

**Acute** 

**Dermal** 

LD50 Rabbit > 2000 mg/kg

Oral

LD50 Rat 2550 mg/kg

Manganese Sulfate, monohydrate (CAS 10034-96-5)

**Acute** 

Oral

LD50

Rat 2150 mg/kg

Zinc Sulfate (CAS 7733-02-0)

**Acute** 

Dermal

LD50 Rat > 2000 mg/kg

Oral

LD50 Rat 920 mg/kg

623 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization

Skin sensitization

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible.

Due to partial or complete lack of data the classification is not possible.

**Carcinogenicity** Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

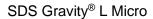
US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Specific target organ toxicity - repeated exposure

Specific target organ toxicity -

single exposure





Suspected of damaging fertility or the unborn child.

e to partial or complete lack of data the classification is not possible.

Du

Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Chronic effects

Due to partial or complete lack of data the classification is not possible.

Prolonged inhalation may be harmful.



# 12. Ecological information

**Ecotoxicity** 

Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Product		Species	Test Results	
Gravity 0-0-0 plus Max	xIn			
Aquatic				
Crustacea	EC50	Daphnia	249.3244 mg/l, 48 hours estimated	
Fish	LC50	Fish	186.9223 mg/l, 96 hours estimated	
Components		Species	Test Results	

Disodium Octaborate Tetrahydrate (CAS 12008-41-2)

Aquatic

Acute

Crustacea LC50 Daphnia magna 619 mg/l
Fish LC50 Pimephales promelas 370 mg/l

Manganese Sulfate, monohydrate (CAS 10034-96-5)

Aquatic

Crustacea EC50 Water flea (Daphnia obtusa) 30.8 - 44.1 mg/l, 48 hours
Fish LC50 Fathead minnow (Pimephales promelas) 36.9 mg/l, 96 hours

29.7 - 52.7 mg/l, 192 hours

Zinc Sulfate (CAS 7733-02-0)

Aquatic

LC50 Green algae (Chlorella vulgaris) 5 mg/l, 24 hours Algae Crustacea EC50 Amphipod (Crangonyx pseudogracilis) 15.1 - 24.5 mg/l, 96 hours Rotifer (Philodina acuticornis) 0.5 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) 10.62 - 11.3 mg/l, 5 days 0.168 - 0.25 mg/l, 96 hours Fish (Lepidocephalichthyes guntea) 76 - 118.8 mg/l, 24 hours

Persistence and degradability Bioaccumulative potential No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** 

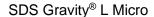
14. Transport information

DOT

Local disposal regulations Hazardous waste code

Waste from residues / unused products

Contaminated packaging





Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations.

Dispose in accordance with all applicable regulations.

D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.



Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### **IMDG**

Not regulated as dangerous goods.

# 15. Regulatory information

**US** federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

#### **Toxic Substances Control Act (TSCA)**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

### CERCLA Hazardous Substance List (40 CFR 302.4)

Manganese Sulfate, monohydrate (CAS 10034-96-5) Listed. Zinc Sulfate (CAS 7733-02-0) Listed.

#### SARA 304 Emergency release notification

Not regulated.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

Yes

chemical

Classified hazard

Skin corrosion or irritation

categories

Serious eye damage or eye irritation

Reproductive toxicity

### SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Manganese Sulfate, monohydrate	10034-96-5	1 - < 3	
Zinc Sulfate	7733-02-0	10 - < 20	

### Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Manganese Sulfate, monohydrate (CAS 10034-96-5)

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

**Safe Drinking Water Act** 

Contains component(s) regulated under the Safe Drinking Water Act.

(SDWA)

### **US** state regulations

### **California Proposition 65**

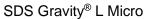
WARNING: This product can expose you to chemicals including arsenic, cadmium, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

# US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Disodium Octaborate Tetrahydrate (CAS 12008-41-2)

### International Inventories

Country(s) or region Inventory name On inventory (yes/no)\*





Australia Australian Inventory of Chemical Substances (AICS)

Canada Domestic Substances List (DSL)
Canada Non-Domestic Substances List (NDSL)

China Inventory of Existing Chemical Substances in China (IECSC)

Europe European Inventory of Existing Commercial Chemical Substances (EINECS)

European List of Notified Chemical Substances (ELINCS)

Japan Inventory of Existing and New Chemical Substances (ENCS)

Korea Existing Chemicals List (ECL)



Yes Yes No No No

No No No

Country(s) or region Inventory name On inventory (yes/no)\*

Philippines Philippine Inventory of Chemicals and Chemical Substances No

(PICCS)

Taiwan Taiwan Chemical Substance Inventory (TCSI)

Yes

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

# 16. Other information, including date of preparation or last revision

 Issue date
 11-06-2020

 Revision date
 1-26-2023

Version # 02

**Disclaimer** The information provided in this Safety Data Sheet is correct to the best of Manufacturer's

knowledge, information and belief at the date of its publication; however, it is provided only as a guidance for safe handling, use, processing, storage, transportation, disposal and release of the Product. No warranties of any kind, either expressed or implied, including warranties of

merchantability or fitness for a particular purpose, are made with respect to the Product or the information provided herein, or that the Product or information herein may be used without infringing the intellectual property rights of others. The information provided in this Safety Data Sheet relates only to the specific Product designated and may not be valid if the Product is used in

combination with other materials or in any other process, unless specified herein. The user assumes all risk and liability for loss, injury, damage or expense due to any use, handling, storage or disposal of the Product, and Manufacturer recommends that the user conducts its owns tests of

the Product to determine suitability of the Product for user's particular use.