SAFETY DATA SHEET

1. Identification

Product identifier Gravity L 18-0-6

Other means of identification

Product code 32088

Agricultural/ Horticultural Use- Micronutrient Fertilizer- Refer to product label. Recommended use

Recommended restrictions Refer to product label. Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Heritage Professional Products Group Company name

7440 State Highway **Address**

McKinney, TX 75070

United States

Telephone Heritage Customer Service 1-855-565-1507

Website heritageppg.com E-mail Not available.

Emergency phone number CHEMTREC 1-800-424-9300

> Rocky Mountain Poison 1-866-767-5042

and Drug

2. Hazard(s) identification

Not classified. Physical hazards

Health hazards Sensitization, skin Category 1

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement May cause an allergic skin reaction.

Precautionary statement

Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. Prevention If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Response

Take off contaminated clothing and wash it before reuse.

Store away from incompatible materials. Storage

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	%
Urea		57-13-6	10 - < 20*
EDTA manganese dipotassium		68015-77-0	1 - < 3*
Ferric Ammonium EDTA		21265-50-9	1 - < 3*
Ammonium Hydroxide		1336-21-6	< 0.1*
Other components below reportable	e levels		70 - < 80

Material name: Gravity L 18-0-6 SDS US 1/7

4. First-aid measures

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

Remove contaminated clothing immediately and wash skin with soap and water. In case of Skin contact

eczema or other skin disorders: Seek medical attention and take along these instructions.

Rinse with water. Get medical attention if irritation develops and persists. Eve contact

Rinse mouth. Get medical attention if symptoms occur. Ingestion May cause an allergic skin reaction. Dermatitis. Rash. Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

treatment needed **General information**

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Foam. Powder. Carbon dioxide (CO2).

No unusual fire or explosion hazards noted.

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Special protective equipment

During fire, gases hazardous to health may be formed.

and precautions for firefighters

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

Fire fighting equipment/instructions

Specific methods

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

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

General fire hazards

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. Avoid breathing mist/vapors. 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 Use water spray to reduce vapors or divert vapor cloud drift.

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.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged

exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe

good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Store in secured area away from children, feed, and other food products. Store in original container. Store in a well-ventilated area. Storage temperature: 40 F to 100 F.

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.

Material name: Gravity L 18-0-6 SDS US

Components	Туре	Value		
Ammonium Hydroxide (CAS 1336-21-6)	PEL	35 mg/m3		
		50 ppm		
EDTA manganese dipotassium (CAS 68015-77-0)	Ceiling	5 mg/m3		
US. ACGIH Threshold Limi	t Values			
Components	Туре	Value		
Ammonium Hydroxide (CAS 1336-21-6)	STEL	35 ppm		
	TWA	25 ppm		
US. NIOSH: Pocket Guide t	o Chemical Hazards			
Components	Туре	Value	Form	
Ammonium Hydroxide (CAS 1336-21-6)	STEL	27 mg/m3		
		35 ppm		
	TWA	18 mg/m3		
		25 ppm		
EDTA manganese dipotassium (CAS 68015-77-0)	STEL	3 mg/m3	Fume.	
,	TWA	1 mg/m3	Fume.	
	ntal Exposure Level (WEEL) Guides			
Components	Туре	Value	Form	
Urea (CAS 57-13-6)	TWA	10 mg/m3	Total particulate.	
ogical limit values	No biological exposure limits noted for	No biological exposure limits noted for the ingredient(s).		
ropriate engineering trols	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.			

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

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

In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene 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. Contaminated work clothing should not be allowed out of the

workplace.

9. Physical and chemical properties

Liquid. **Appearance** Liquid. **Physical state Form** Liquid.

Green. to. Brown. Color Odor faint sweet odor **Odor threshold** Not available. 9 - 10

Melting point/freezing point Not available.

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range

Not available.

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 Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

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

Other information

Density 1.25 - 1.29 g/cm3

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

Percent volatile 35.51 % estimated

pH in aqueous solution 7 - 9 (1% Solution) estimated

Pounds per gallon 10.63 lb/gal (typical)

Specific gravity

1.32 estimated

VOC

8.8 % estimated

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

InhalationProlonged inhalation may be harmful.Skin contactMay cause an allergic skin reaction.

Eye contactKnowledge about health hazard is incomplete.
Ingestion
Knowledge about health hazard is incomplete.

Symptoms related to the physical, chemical and toxicological characteristics

May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not known.

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Product	Species	Test Results	
Gravity L 18-0-6			
<u>Acute</u>			
Dermal			
LD50	Rabbit	94970 mg/kg	
Oral			
LD50	Rat	47960 mg/kg	
Components	Species	Test Results	
Ammonium Hydroxide (CA	S 1336-21-6)		
<u>Acute</u>			
Oral			
LD50	Rat	350 mg/kg	

Urea (CAS 57-13-6)

<u>Acute</u> Oral

LD50 Rat 8471 mg/kg

Skin corrosion/irritation

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

Serious eye damage/eye irritation

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

Respiratory or skin sensitization

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

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity

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 toxicityDue to partial or complete lack of data the classification is not possible. **Specific target organ toxicity -**Due to partial or complete lack of data the classification is not possible.

Single exposure

Specific target organ toxicity - repeated exposure

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

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

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

EcotoxicityThe product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product		Species	Test Results
Gravity L 18-0-6			
Aquatic			
Crustacea	EC50	Daphnia	28491.4766 mg/l, 48 hours estimated
Acute			
Fish	LC50	Fish	18044.3711 mg/l, 96 hours estimated
Components		Species	Test Results

Ammonium Hydroxide (CAS 1336-21-6)

Aquatic

Fish LC50 Western mosquitofish (Gambusia affinis) 15 mg/l, 96 hours

Material name: Gravity L 18-0-6

Components **Test Results Species**

Urea (CAS 57-13-6)

Aquatic

EC50 Crustacea Water flea (Daphnia magna) 3910 mg/l, 48 hours Fish LC50 Carp (Leuciscus idus melanotus) > 10000 mg/l, 48 hours

> Guppy (Poecilia reticulata) 16200 - 18300 mg/l, 96 hours

> > 12000 mg/l, 96 hours

Harlequinfish, red rasbora (Rasbora

heteromorpha)

Mozambique tilapia (Tilapia 590 - 730 mg/l, 96 hours

mossambica)

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Urea -2.11

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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

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 Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US** federal regulations

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)

Ammonium Hydroxide (CAS 1336-21-6) Listed. EDTA manganese dipotassium (CAS 68015-77-0) Listed.

SARA 304 Emergency release notification

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

Material name: Gravity L 18-0-6 SDS US SARA 311/312 Hazardous

Classified hazard

chemical

Respiratory or skin sensitization

categories

SARA 313 (TRI reporting)

Chemical name **CAS** number % by wt. EDTA manganese dipotassium 68015-77-0 1 - < 3

Other federal regulations

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

Yes

EDTA manganese dipotassium (CAS 68015-77-0)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

Inventory name

(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.

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
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

01-27-2023 Issue date 04-25-2023 **Revision date**

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.

Product and Company Identification: Product and Company Identification **Revision information**

Identification: Recommended restrictions

Material name: Gravity L 18-0-6

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On inventory (yes/no)*