Safety Data Sheet

Issue Date: 02-Dec-2019 Revision Date: 05-Dec-2019 Version 1

1. IDENTIFICATION

Product identifier Product

Name

Gravity L 38 Special with Take Off Technology 5-0-15

Recommended use of the chemical a

use

Recommended Use Nutrient.

Details of the supplier of the safety d a sheet

Distributed by:

Winfield Solutions, LLC PO Box 64589 St. Paul, MN 55164-0589

Supplier Address

Verdesian Life Sciences, U.S., LLC. 1001 Winstead Drive, Suite 480 Cary, NC 27513

Emergency telephone number

Company Phone Number

Business Phone: (800) 868-6446

Fax: (919) 535-3652

Emergency Telephone INFOTRAC 1-352-323-3500 (International) 1-800-535-

5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear liquid Physical state Liquid

Classification

Acute toxicity - Oral Category 4

Signal Word Warning

Hazard statements

Harmful if swallowed



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

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Precautionary Statements - Response

 $IF\ SWALLOWED:\ Call\ a\ POISON\ CENTER\ or\ doctor/physician\ if\ you\ feel\ unwell\ Rinse$

mo uth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS						
Chemical name CAS No Weight-%						
Proprietary	Proprietary	Proprietary				
Potassium hydroxide	1310-58-3	15-20				
Proprietary	Proprietary	Proprietary				
Proprietary	Proprietary	Proprietary				

^{**}If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST AID MEASURES

Description of first aid measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists:

Get medical advice/attention.

Skin Contact Wash off immediately with plenty of water. Take off contaminated clothing. Wash

contaminated clothing before reuse. If skin irritation persists, call a physician.

Inhalation Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center

if individual's condition declines or if symptoms persist.

Ingestion Do NOT induce vomiting. Rinse mouth. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms May cause eye, skin and respiratory tract irritation. Will cause gastrointestinal tract irritation. Indication of any

immediate medical attention and special treatment needed 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 Not determined.

Specific Hazards Arising from the Chemical Product

is not flammable.

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.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate area

of leak or spill.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an

absorbent material.

Methods for Clean-Up

Sweep up absorbed material and shovel into suitable containers for disposal. Discard any

product, residue, disposable container or liner in full compliance with federal, state, and

local regulations. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling

Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly

after handling. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Strong oxidizing agents. Strong acids. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSHIDLH
Potassium hydroxide 1310-58- 3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m³
Proprietary	-	15 mg / m3 (Total)	-
Proprietary	-	TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, respirable fraction	-

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear eye/face protection. Refer to 29 CFR 1910.133 for eye and face protection

regulations.

Skin and Body Protection Wear suitable protective clothing. Refer to 29 CFR 1910.138 for appropriate skin and body

protection.

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Respiratory Protection

Ensure adequate ventilation, especially in confined areas. Refer to 29 CFR 1910.134 for

respiratory protection requirements.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Liquid

Appearance Color

Clear liquid

Clear

Odor **Odor Threshold** Not determined Not determined

Remarks • Method

Property рΗ

Flash point

Values 5.7

Melting point / freezing point Boiling point / boiling range

Not determined Not determined Not determined Not determined

Flammability (Solid, Gas)

Evaporation Rate

Liquid-Not applicable

Flammability Limit in Air

Not determined

Upper flammability or explosive

limits

Lower flammability or explosive

Not determined

limits

Not determined Vapor Pressure Not determined Vapor Density

Relative Density 1.45

W ater Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined

Not determined **Autoignition temperature Decomposition temperature** Not determined

Not determined Ki nematic viscosity **Dynamic Viscosity** Not determined

Not determined **Explosive Properties Oxidizing Properties** Not determined

Other information Liquid

Density

12.10 lbs.gal

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

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Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions None

under normal processing.

Conditions to Avoid Heat,

flames and sparks.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

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Hazardous decomposition products None

known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Direct contact with eyes may cause temporary irritation.

Skin Contact May cause temporary irritation on skin contact.

Inhalation May cause irritation if inhaled.

Ingestion Harmful if swallowed.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Proprietary		- 9784: 96 h Brachydanio rerio mg/L LC50 static	
Proprietary		80: 96 h Gambusia affinis mg/L LC50 static	

Proprietary	1516: 96 h Lepomis macrochirus mg/L LC50	120: 72 h Daphnia magna mg/L EC50

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Proprietary	= 1895 mg/kg(Rat)	-	-
Potassium hydroxide 1310- 58-3	= 284 mg/kg (Rat)	-	-
Proprietary	= 3000 mg/kg(Rat)= 3 g/kg(Rat)	> 2000 mg/kg (Rat)	•
Proprietary	= 12600 mg/kg (Rat)	> 10 g/kg(Rabbit)	> 570 mg/m³(Rat)1 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

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

 Oral LD50
 1,330.34 mg/kg

 Dermal LD50
 16,022.30 mg/kg

 ATEmix (inhalation-dust/mist)
 3.22 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Component Information

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Proprietary	51 - 57: 96 h Oncorhynchus mykiss	500: 24 h Daphnia magna mg/L
	mL/L LC50 static	EC50

Persistence/Degradability Not

determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Potassium hydroxide 1310-58- 3	0.83
Proprietary	-1.72
Proprietary	-1.76

Other Adverse Effects

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/EL NCS	ENCS	IECSC	KECL	PICCS	AICS
Proprietary	Χ	ACTIVE	Х	Х	Χ	Х	Х	Χ	Х
Proprietary	Х	ACTIVE	Х	Х			Х		
Potassium hydroxide	Х	ACTIVE	Х	Х	X	Х	Х	Х	Х

Proprietary	Χ	ACTIVE	Χ	Χ	Χ	Χ	Χ	Χ	Х
Proprietary	Χ	ACTIVE	Х	Х	Х	Х	Х	Х	Х

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated Packaging
California Hazardous Waste Status

Disposal should be in accordance with applicable regional, national and local laws and

<u>ıs</u> regulations.

Chemical name	California Hazardous Waste Status
Potassium hydroxide 1310-58-	Toxic
3	Corrosive

14. TRANSPORT INFORMATION

Note The data provided in this section is for information only. Please apply the appropriate

regulations to properly classify your shipment for transportation.

DOT Not regulated

IMDG Not regulated

Not regulated

15. REGULATORY INFORMATION

International Inventories

Gravity L 38 Special with Take Off Technology

Proprietary	X	Х	Х	Х		Х	Χ
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Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Potassium hydroxide 1310-58-3	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

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

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide	1000 lb			X

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Proprietary	X		
Potassium hydroxide 1310-58-3	Х	Х	X
Proprietary	Х	X	Х

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16. OTHER INFORMATION						
NFPA	Health Hazards determined	Flammability Not Not determined	Instability Not determined	Special Hazards Not determined		
<u>HMIS</u>	Health Hazards determi ned	Flammability Not Not determined	Physical hazards Not determined	Personal Protection Not determined		

Issue Date:02-Dec-2019Revision Date:05-Dec-2019Revision Note:New product

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet