Safety Data Sheet

Issue Date: 08-Feb-2021 **Revision Date:** 19-Feb-2021 **Version** 1

1. IDENTIFICATION

Product identifier

Product Name ReKovery Fruit

Other means of identification

SDS # VLS-329

Product Code FFN 4166

Recommended use of the chemical and restrictions on use

Recommended Use For industrial use.

Details of the supplier of the safety data sheet

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 Odor Musty

Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eve damage/eve irritation	Category 2

Signal Word Warning

Hazard statements

Harmful if swallowed Causes skin irritation Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap Take off contaminated clothing and wash before reuse

If skin irritation occurs: Get medical advice/attention

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

Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Acetic acid	64-19-7	30-35
Potassium hydroxide	1310-58-3	25-30

^{**}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

Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact Wash with plenty of soap and water. Take off contaminated clothing and wash it before

reuse. If skin irritation occurs: Get medical advice/attention.

Inhalation Remove to fresh air.

Ingestion Call a poison center or doctor/physician if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms May be harmful in contact with skin. Harmful if swallowed. Causes skin irritation. Causes

serious eye 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

Not determined.

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 PrecautionsUse personal protective equipment as required.

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.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or

smoke when using this product. Wear protective gloves/protective clothing and eye/face

protection.

Conditions for safe storage, including any incompatibilities

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

Incompatible MaterialsNone known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic acid	STEL: 15 ppm	TWA: 10 ppm	IDLH: 50 ppm
64-19-7	TWA: 10 ppm	TWA: 25 mg/m ³	TWA: 10 ppm
		(vacated) TWA: 10 ppm	TWA: 25 mg/m ³
		(vacated) TWA: 25 mg/m ³	STEL: 15 ppm
			STEL: 37 mg/m ³
Potassium hydroxide	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
1310-58-3			

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 Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection Refer to 29 CFR 1910.138 for appropriate skin and body protection.

Respiratory Protection 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 Clear liquid Odor Musty

Color Colorless Odor Threshold Not determined

Property Values Remarks • Method

pH 7.86

Melting point / freezing point
Boiling point / boiling range
Flash point
Evaporation Rate
Flammability (Solid, Gas)
Not determined
Not determined
Not determined
Liquid-Not applicable

Flammability Limit in Air

Upper flammability or explosive Not determined

limits

Lower flammability or explosive Not determined

limits

Vapor Pressure Not determined Vapor Density Not determined

Relative Density 1.304

Water Solubility Not determined Solubility in other solvents Not determined **Partition Coefficient** Not determined **Autoignition temperature** Not determined **Decomposition temperature** Not determined Kinematic viscosity Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

Other information

Bulk density 10.86 lbs/gal

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact May be harmful in contact with skin.

Inhalation Do not inhale.

Ingestion Harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Acetic acid 64-19-7	= 3310 mg/kg (Rat)	= 1060 mg/kg(Rabbit)	= 11.4 mg/L (Rat)4 h
Potassium hydroxide 1310-58-3	= 284 mg/kg(Rat)	-	-

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

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

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
 728.60 mg/kg

 Dermal LD50
 3,164.20 mg/kg

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

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Potassium hydroxide		80: 96 h Gambusia affinis mg/L	
1310-58-3		LC50 static	
Acetic acid		79: 96 h Pimephales promelas mg/L	47: 24 h Daphnia magna mg/L
64-19-7		LC50 static 75: 96 h Lepomis	EC50 65: 48 h Daphnia magna
		macrochirus mg/L LC50 static	mg/L EC50 Static

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Acetic acid 64-19-7	-0.31
Potassium hydroxide 1310-58-3	0.83

Other Adverse Effects

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

regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Acetic acid	Toxic
64-19-7	Corrosive
	Ignitable
Potassium hydroxide	Toxic
1310-58-3	Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

<u>IMDG</u> Not regulated

15. REGULATORY INFORMATION

International Inventories

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

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

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acetic acid	5000 lb		RQ 5000 lb final RQ
64-19-7			RQ 2270 kg final RQ
Potassium hydroxide	1000 lb		RQ 1000 lb final RQ
1310-58-3			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)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetic acid	5000 lb			X
Potassium hydroxide	1000 lb			Х

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
Acetic acid 64-19-7	X	X	X
Potassium hydroxide 1310-58-3	Х	X	Х

16. OTHER INFORMATION

Health Hazards NFPA **Flammability** Instability **Special Hazards** Not determined Not determined Not determined Not determined **HMIS Health Hazards Flammability** Physical hazards **Personal Protection** Not determined Not determined Not determined Not determined

Issue Date:08-Feb-2021Revision Date:19-Feb-2021Revision Note:New format

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