Section 1: Product and Company Identification

Greenway Nutrients
405 S. Platte River Drive
Denver, CO 80202
Product Name:
Synonyms:
Product Name:
Essential oil mixture
Not Applicable
Product Description:
Plant treatment

Business: 877-366-5338 CAS # Not applicable – mixture

Web: NoPowderyMildew.com Date of Revision: 28 July 2011

Section 2: Hazard Identification

Emergency Overview: Colorless fragrant liquid. May be irritating to skin, eyes and respiratory system. May be a skin sensitizer.

HMIS HEALTH	0
HMIS FLAMMABILITY	0
HMIS REACTIVITY	0
PERSONAL PROTECTION	Α

OSHA Regulatory Status: This material **is not** considered hazardous under

the OSHA standard.

WHMIS Classification: Not controlled

Potential Health Effects:

Inhalation: May irritate the respiratory tract. **Ingestion**: May irritate the digestive tract.

Skin Contact: May cause irritation. May be a sensitizer to certain individuals.

Eye Contact: Liquid and vapor may cause eye irritation.

Chronic Exposure: No information found.

Aggravation of Pre-existing Conditions: No information found.

Target Organs: Skin, eyes, respiratory system.

Section 3: Composition / Information On Ingredients

Component	Common Names, Synonyms	CAS#	EINECS	Weight %
Oil of geranium		8000-46-2	90082-46-5	2.4
Oleic acid	cis-9-octadecanoic acid	112-80-1	204-007-1	< 1
Citric acid	2-Hydroxy-1,2,3-propanetricarboxylic acid	77-92-9	201-069-1	< 1

Non-hazardous components may or may not be listed. Carcinogens are listed when present at 0.1% or more; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or more. This is not intended to be complete compositional disclosure. See Section 15 for applicable states right to know and other regulatory information.

Section 4: First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin: Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops. **Eyes**: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention.

Note to Physician: Not applicable

Section 5: Fire Fighting Measures

Fire: Flash point: Not flammable

Explosion: Not considered an explosion hazard.

Extinguishing Media: Dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed

containers cool.

Special Precautions: None.

NFPA Rating: Health - 0 Flammability - 0 Reactivity - 0 Other - NA

Section 6: Accidental Release Measures

Ventilate area of leak or spill. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container.

Section 7: Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage and moisture. Isolate from any source of heat or ignition. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

Section 8: Exposure Control / Personal Protection				
Exposure Guidelines:				
Component	CAS#	OSHA PEL	ACGIH TLV	NIOSH TLV
Oil of geranium	8000-46-2	None established	None established	None established
Oleic acid	112-80-1	None established	None established	None established
Citric acid	77-92-9	None established	None established	None established

Personal Protective Equipment:

Skin Contact: Wear impervious gloves, as appropriate, to prevent unintentional skin contact. **Eye Contact**: Use chemical safety goggles where misting or splashing of solution is possible.

Inhalation: General ventilation is recommended.

Section 9: Physical and Chemical Properties				
Appearance	Colorless liquid	Specific Gravity (g/mL)	1.000	
Odor	Mild, flowery, roses	pH	Not determined	
Odor Threshold	Not determined	Solubility in water	Mostly	
Melting Point	Not determined	% Volatiles	>99%	
Boiling Point	100°C (212°F)	Evaporation Rate	Not determined	
Flash Point	Not flammable	Vapor Pressure	Not determined	

Section 10: Stability and Reactivity

Chemical Stability: This product is stable in closed containers at room temperature.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂).

Incompatibilities: Strong oxidizers, sparks, flame, heat

Conditions to Avoid: Incompatible materials, combustible materials.

Section 11: Toxicological Information

Acute Dose Effects: Eye: Mild Iirritant

Oral: Oil of rosemary: Rat LD₅₀: 5000 mg/kg; Oleic acid: Rat LD₅₀: 25000 mg/kg; Citric acid: Rat LD₅₀: 3000 mg/kg

Inhalation: No information found.

Skin: Gerianol: Draize Test, Rabbit: 100 mg/24 hr, Severe; Rabbit LD₅₀: >5000 mg/kg

Carcinogenicity: Not listed by ACGIH, IARC, NTP or CA Proposition 65

Section 12: Ecological Information

Environmental Fate: This product is not expected to bioaccumulate.

Ecotoxicity: This product is expected to be of low toxicity to higher organisms.

Section 13: Disposal Considerations

As a waste, this material in its raw form IS NOT considered a HAZARDOUS WASTE under RCRA (29 CFR 261).

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14: Transport Information

Proper Shipping Name: Not regulated by DOT, IATA, TDG or IMDG

DOT Hazard Class: N/A UN Number: N/A Packing Group: N/A

CERCLA Reportable Quantity (RQ): N/A

CERCLA Reportable Quantity (RQ): N/A

Releases exceeding the reportable quantity (RQ) must be reported to the National Response Center (800) 424-8802. This data provided for information only. The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations to properly classify your shipment for transportation.

Section 15: Regulatory Information

TSCA Chemical Inventory: All of the components in this product are listed on the TSCA Inventory.

TSCA Sec 4 Chemical Test Rule: None of the components in this product are on this list.

TSCA Sec 8(d): None of the components in this product are on the Health and Safety Reporting List.

TSCA Sec 12(b) Notices of Export: None of the components in this product are on this list.

TSCA Significant New Use Rule (SNUR): None of the components in this product are on this list.

SARA Sec 302 (EHS) TPQ: None of the components in this product have a TPQ.

SARA Sec 302 (EHS) RQ: None of the components in this product have a RQ.

SARA Sec 311/312: Acute – NO; Chronic – NO; Fire – NO; Release of Pressure – NO; Reactivity – NO

SARA 313 List: None of the components in this product are reportable under Section 313 Title III and 40 CFR Part 372.

CERCLA Hazardous Substances and corresponding RQs: N/A

RCRA: None of the components in this product are on this list.

Clean Air Act: Hazardous Air Pollutants? NO Class 1 Ozone Depletors? NO Class 2 Ozone Depletors? NO

Clean Water Act: Hazardous Substance? NO Priority Pollutant? NO Toxic Pollutant? NO

Chemical Weapons Convention: None of the components in this product are on this list.

Drug Enforcement Agency (DEA) CDTA: None of the components in this product are on this list.

OSHA: None of the components in this product are considered Highly Hazardous by OSHA.

State Right-to-Know Lists: None of the components in this product are on this list.

California Proposition 65 WARNING: None of the components in this product are on this list.

Canadian WHMIS: Not controlled

Canadian Ingredient This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian DSL/NDSL: All of the components in this product listed or exempt from listing.

Canadian Ingredient Disclosure List: None of the components of this product is listed on the Canadian Ingredient Disclosure List.

Section 16: Other Information

tions and acronyms used:		
American Conference of Governmental Industrial Hygienists	NA	not applicable, not available
American National Standards Institute	NIOSH	National Institute for Occupational Safety and Health
atmosphere (pressure unit)	ND	not determined
biological oxygen demand	NFPA	National Fire Prevention Association
Chemical Abstracts Service	NTP	National Toxicology Program
closed cup	OC	open cup
Chemical Drug and Trafficking Act	OSHA	Occupational Safety and Health Administration
Cleveland Open Cup	Part	partition
chemical oxygen demand	PEL	permissible exposure limits
coefficient	ppb	parts per billion
Code of Federal Regulations	PPE	personal protective equipment
cardio-pulmonary resuscitation	ppm	parts per million
Drug Enforcement Agency	psi	pounds per square inch
Department of Transportation	RCRA	Resource Conservation and Recovery Act
Food and Drug Administration	RQ	Reportable quantity
Internat'l Agency for Research on Cancer	RTK	Right to Know
immediate danger to life and health	SARA	Superfund Amendments and Reauthorization Act
kilogram	STEL	short-term exposure limit
liter	TCC	Tagliabue Closed Cup
median lethal concentration	TPQ	threshold planning quantity
median lethal dose	TQ	threshold quantity
lower explosive limit	TSCA	Toxic Substances Control Act
milligram	TWA	time-weighted average
milliliter	UEL	upper explosive limit
	American Conference of Governmental Industrial Hygienists American National Standards Institute atmosphere (pressure unit) biological oxygen demand Chemical Abstracts Service closed cup Chemical Drug and Trafficking Act Cleveland Open Cup chemical oxygen demand coefficient Code of Federal Regulations cardio-pulmonary resuscitation Drug Enforcement Agency Department of Transportation Food and Drug Administration Internat'l Agency for Research on Cancer immediate danger to life and health kilogram liter median lethal concentration median lethal dose lower explosive limit milligram	American Conference of Governmental Industrial Hygienists American National Standards Institute American National Standards Institute atmosphere (pressure unit) biological oxygen demand Chemical Abstracts Service NTP closed cup OC Chemical Drug and Trafficking Act Cleveland Open Cup Chemical oxygen demand Cleveland Open Cup Coefficient ppb Code of Federal Regulations PPE cardio-pulmonary resuscitation ppm Drug Enforcement Agency psi Department of Transportation RCRA Food and Drug Administration RQ Internat'l Agency for Research on Cancer immediate danger to life and health kilogram liter liter TCC median lethal concentration median lethal dose I Q lower explosive limit TSCA milligram TWA

This document was prepared in accordance with 29 CFR 1910.1200 and ANSI Z400.1-2004.

Prepared by Douglas R. Chrisope on 28 July 2011.

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