

SAFETY DATA SHEET

Issuing date: July 15, 2022

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Version: 1

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifier

PRODUCT NAME : Clean Green Miticide-Insecticide Concentrate
SYNONYMS : ECS-G-816

1.2. Relevant identified uses of the substance or mixture and uses advised against

RECOMMENDED USE : Miticide-Insecticide

1.3. Details of the supplier of the safety data sheet

SUPPLIER NAME : Pure Origin Products
SUPPLIER ADDRESS : 2208 N MCKINZIE LN
LIBERTY LAKE, WA, 99019 USA
SUPPLIER PHONE NUMBER : 1-425-780-6135
EMERGENCY PHONE NUMBER : Info Trac Chemical Response System
1-800-535-5053 (24 hours)

2. HAZARDS IDENTIFICATION

2.1. Classification

Skin irritation : Category 2
Skin sensitization : Category 1
Serious eye damage/eye irritation : Category 1
Hazardous to the aquatic environment, long-term : Category 3
Aspiration Hazard : Category 1
Specific target organ toxicity – Single Exposure : Category 2
Acute toxicity, oral : Category 4
Acute toxicity, inhalation : Category 5
Flammable Liquids : Category 3

2.2. Label elements

HAZARD PICTOGRAMS :



SIGNAL WORD :

Danger

HAZARDOUS INGREDIENTS :

Geraniol 980 / Rosemary Oil / Peppermint Oil are considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

HAZARD STATEMENTS :

H226 – Flammable liquid and vapor
H302 – Harmful if swallowed
H304 – May be fatal if swallowed and enters airways.

H315 – Causes skin irritation
H317 – May cause an allergic skin reaction
H318 – Causes serious eye damage
H333 – May be harmful if inhaled
H371 – May cause damage to organs
H412 – Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENTS

- : **P210** – Keep away from heat, hot surface, sparks, open flames and other ignition sources – No smoking.
P233 – Keep container tightly closed.
P240 – Ground/bond container and receiving equipment.
P241 – Use explosion-proof equipment.
P242 – Use non-sparking tools.
P243 – Take precautionary measures against static discharge.
P260 – Do not breathe dust/fumes/gas/mist/vapors/spray
P261 – Avoid breathing fume/mist/vapors/spray
P264 – Wash thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P271 – Use only outdoors or in a well-ventilated area.
P272 – Contaminated work clothing should not be allowed out of the workplace.
P273 – Avoid release to the environment.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

RESPONSE

- : **P310** – Immediately call a POISON CENTER or doctor/physician if in eyes.
P312 – Call a POISON CENTER or doctor if inhaled and you feel unwell.
P321 – Specific treatment (see supplemental first-aid instructions).
P330 – Rinse mouth.
P331 – Do NOT induce vomiting
P362 – Take off contaminated clothing.
P363 – Wash contaminated clothing before reuse.
P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P301 + P312 – If SWALLOWED: call a POISON CENTER or doctor if you feel unwell.
P304 + P312 - If INHALED: call a POISON CENTER or doctor if you feel unwell.
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 – If INHALED: Removed person to fresh air and keep comfortable for breathing.
P309 + P311 – IF exposed or if you feel unwell: call a POISON CENTER or doctor/physician.
P332 + P313 – If SKIN irritation occurs: Get medical advice/attention.
P333 + P313 – If SKIN irritation or rash occurs: Get medical advice/attention.
P370 + P378 – In case of fire: Use CO₂, dry chemical, dry sand, alcohol-resistant foam to extinguish.
P303 + P361 + P353 – IF ON SKIN (or hair): Take off Immediately all contaminated clothing. Rinse SKIN with water (or shower).

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

STORAGE : **P405** – Store in a secure manner.
P403+P235 – Store in a well-ventilated place. Keep cool.

DISPOSAL : **P501** – Dispose of contents and/or container to an approved disposal plant.

2.3. Other hazards

OTHER HAZARDS NOT CONTRIBUTING TO THE CLASSIFICATION : No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixtures

This product is a mixture.

Component name	Identifier (CAS-no.)	%
Geraniol 980	106-24-1	3.0
Rosemary Oil	8000-25-7	10.0
Peppermint Oil	8006-90-4	13.0
Inert ingredients	-	to 100%
Disclaimer: Exact identities and/or concentrations of inert ingredients have been withheld as a trade secret		

4. FIRST AID MEASURES

4.1. Description of first aid measures

GENERAL : Take hazard and precautionary statements into account

IF IN EYES : Immediately call POISON CENTER or doctor/physician. Cautiously rinse eyes with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

IF ON SKIN : Remove contaminated clothes. Wash skin thoroughly with soap and water. Obtain medical advice if irritation or rash occurs.

IF INHALED : Immediately call POISON CENTER or doctor/physician. Remove person from exposure site to fresh air and keep at rest.

IF SWALLOWED : Immediately call POISON CENTER or doctor/physician. Rinse mouth with water.

4.2. Most important symptoms and effects, both acute and delayed

No information available

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

SUITABLE EXTINGUISHING MEDIA : CO₂, dry chemical, dry sand, alcohol-resistant foam.

UNSUITABLE EXTINGUISHING MEDIA : Do not use direct water stream. May spread fire.

5.2. Special hazards arising from the substance or mixture

SPECIFIC HAZARDS FOR FIREFIGHTING : Water may be ineffective.

HAZARDOUS DECOMPOSITION PRODUCTS : Carbon monoxide (CO), Carbon dioxide (CO₂).

5.3. Advice for firefighters

PROTECTION DURING FIREFIGHTING : Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and accidental emergency procedures

PERSONAL PRECAUTIONS : Avoid inhalation and contact with skin and eyes. Appropriate personal protective equipment should be worn.

6.2. Methods and materials for containment and cleaning up

FOR CONTAINMENT AND CLEAN UP : Clean up spillage promptly. Provide adequate ventilation. Avoid excessive inhalation of vapors. Gross spillage should be contained by use of sand or inert material and disposed of according to the local regulations. Wash affected area with water.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

PRECAUTIONS FOR SAFE HANDLING : Avoid inhalation of concentrated vapors, contact with skin and eyes. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after handling. Do not eat, drink, or smoke while using this product. Contaminated clothing and shoes should be thoroughly cleaned before re-use.

7.2. Conditions for safe storage, including any incompatibilities

STORAGE CONDITIONS : Store securely in a cool, dry ventilated area. Keep containers tightly closed when not in use. Ground/bond equipment and receiving equipment. Keep out of reach of children.

INCOMPATIBLE MATERIALS : Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

CONTROL PARAMETERS : If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

8.2. Exposure controls

ENGINEERING CONTROLS	:	If appropriate, isolate mixing rooms and other areas where this material is used or openly handled. Apply local exhaust system or maintain these areas under negative air pressure relative to the rest of the operation. Ensure access to showers, eye wash stations and have adequate ventilation systems.
SKIN PROTECTION	:	Avoid skin contact. Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur.
EYE PROTECTION	:	Use tight fitting goggles, face shield or safety glasses.
RESPIRATORY PROTECTION	:	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

PHYSICAL STATE	:	Liquid
COLOUR	:	Yellow, transparent, faintly hazy
ODOUR	:	Mint
ODOUR THRESHOLD	:	No information available
pH	:	No information available
MELTING POINT	:	No information available
FREEZING POINT	:	No information available
BOILING POINT	:	No information available
FLASH POINT	:	58 °C
AUTO-IGNITION TEMPERATURE	:	No information available
DECOMPOSITION TEMPERATURE	:	No information available
FLAMMABILITY (SOLID, GAS)	:	No information available
VAPOUR PRESSURE	:	No information available
DENSITY AT 20°C (g/mL)	:	0.95
SOLUBILITY	:	No information available
VISCOSITY, KINEMATIC	:	13.78 mm ² /s @ 40°C
VISCOSITY, DYNAMIC	:	13.09 cP @ 40 °C

10. STABILITY AND REACTIVITY**10.1. Reactivity, stability and hazards**

REACTIVITY	:	No hazards to be specifically mentioned.
CHEMICAL STABILITY	:	No information available

POSSIBILITY OF HAZARDOUS REACTIONS	:	No information available
CONDITIONS TO AVOID	:	Direct sources of heat. Chemical incompatibilities (refer to Section 7).
INCOMPATIBLE MATERIALS	:	Avoid contact with strong acids, strong bases, and strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS	:	Carbon monoxides, carbon dioxides and unidentified compounds may be formed during combustion.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

ACUTE TOXICITY

No specific acute toxicity data is available for this mixture. Acute toxicity data on hazardous components >1.0% total concentration is given below:

Component	Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation Toxicity
Geraniol 980	LD50 Oral - 3,600 mg/kg; Remarks: Behavioral: Somnolence (general depressed activity). Behavioral: Coma. Skin and Appendages: Other: Hair.	LD50 Dermal - rabbit - >5,000 mg/kg	No data available
Rosemary Oil	No data available	No irritant effect	No data available
Peppermint Oil	LD50 Oral - Rat - 4,440 mg/kg	No information available	No information available
Proprietary Component D	LD50 Oral - Rat - > 2,000 mg/kg	LD50 Dermal - Rat - > 5,000 mg/kg	Rat: > 5.4 mg/l (4 hr) (vapors)
Proprietary Component E	LD50 Oral - Rat - >20,000 mg/kg	LD50 Dermal - Guinea Pig - 45 ml/kg	L(Ct)50 - Rat - 4655 mg/min/l
Proprietary Component F	LD50 Oral - Rat - >5,000 mg/kg	LD50 Dermal - Rat - >5,000 mg/kg	No data available
Proprietary Component G	LD50 Oral - Rat - >5,000 mg/kg	LD50 Dermal - Rat - >2,000 mg/kg	LC50 Inhalation - Rat - >5 mg/kg (mist)

SKIN CORROSION/IRRITATION

No specific skin corrosion/irritation data is available for this mixture. Skin corrosion/irritation data on hazardous components >1.0% total concentration is given below:

Component	Skin Corrosion and Irritation
Geraniol 980	Skin - rabbit - Irritating to skin - 24h (OECD Test Guideline 404)
Peppermint Oil	This substance is classified as a skin irritant due to the presence of menthol.
Proprietary Component D	May cause mild irritation; prolonged and repeated contact with skin can cause defatting and drying of the skin which may result in irritation and dermatitis.
Proprietary Component F	May cause skin irritation.

SERIOUS EYE DAMAGE/IRRITATION

No data is available on serious eye damage/irritation for this mixture. Serious eye damage/irritation data on hazardous components >1.0% total concentration is given below:

Component	Serious Eye Damage and Irritation
Geraniol 980	Eyes - rabbit - Risk serious damage to eyes - 24h
Rosemary Oil	No irritating effect

Peppermint Oil	The substance may be irritating to the eyes
Proprietary Component D	Causes mild to moderate irritation; May cause pain, tearing, redness, swelling, stinging
Proprietary Component E	Species: Rabbit -Test duration: 7 days - 0.1 ml in vivo Result: No effects
Proprietary Component F	May cause eye irritation

RESPIRATORY OR SKIN SENSITIZATION

No specific respiratory or skin sensitization data is available for this mixture. Respiratory and skin sensitization data on hazardous components >0.10% total concentration is given below:

Component	Respiratory or Skin Sensitization
Geraniol 980	May cause skin sensitization by skin contact.
Rosemary Oil	Possible sensitization.
Peppermint Oil	The substance is a potential skin sensitizer due to the presence of limonene (>1%).
Proprietary Component D	May cause moderate irritation. May irritate respiratory tract. May cause shortness of breath
Proprietary Component F	May be harmful if inhaled. Unlikely to cause serious injury.

MUTAGENICITY

No data is available on mutagenicity for this mixture. Mutagenicity data on hazardous components >1.0% total concentration is given below:

Component	Mutagenicity
Proprietary Component E	Ames test: Species - Salmonella Typhimurium (Salmonella enterica) Result: Negative in vitro, OECD 471 Chromosome aberration: Test subject - Chinese hamster ovary Result: No effects in vitro, OECD 471

CARCINOGENICITY

No data is available on carcinogenicity for this mixture. Carcinogenicity data on hazardous components >0.1% total concentration is given below:

Component	Carcinogenicity
Proprietary Component E	Species: Rat 2 years Result: No effects

REPRODUCTIVE TOXICITY

No data is available on reproductive toxicity for this mixture. Reproductive toxicity data on hazardous components >0.1% total concentration is given below:

Component	Reproductive Toxicity
Proprietary Component E	Species: Rat Oral - 2000 mg/kg bw/day - feed, 2 Result: No effects generation study

STOT – SINGLE EXPOSURE

No data is available on Specific Target Organ Toxicity – Single Exposure for this mixture. Single exposure data on hazardous components >1.0% total concentration is given below:

Component	Specific Target Organ Toxicity – Single Exposure
Proprietary Component E	Species: Rat Test Duration: 13 Weeks 167 mg/m ³ Inhalation, NOAEL Result: No effects OECD 413
	Species: Rabbit Test Duration: 13 Weeks 5040 mg/kg bw/day Dermal, NOEL Result: No effects
	Species: Rat Test Duration: 2 years 8000-10000 mg/kg bw/day Oral, NOAEL Result: No effects OECD 452

STOT – REPEATED EXPOSURE

No data is available on Specific Target Organ Toxicity – Repeated Exposure for this mixture.

ASPIRATION HAZARD

No data is available on Aspiration Hazards for this mixture.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

GENERAL ECOLOGICAL TOXICITY

No specific ecological toxicity data is available for this mixture. Ecological toxicity data on hazardous components >1.0% total concentration is given below:

Component	Freshwater Algae	Freshwater Fish	Microorganisms	Invertebrates
Geraniol 980	EC50 - Desmodesmus subspicatus - 13.1 mg/L - 72h	LC50 - Danio rerio - ca. 22 mg/L - 96 h (OECD Test Guideline 203).	No data available	EC50 - Daphnia magna - 10.8 mg/L - 48 h (OECD Test Guideline 202).
Rosemary Oil	No information available	Very toxic for fish	No information available	Very toxic for aquatic organisms
Proprietary Component D	Acute Category III - Essential non-toxic (>100 mg/L)	Acute Category III - Essential non-toxic (>100 mg/L)	No information available	Acute Category III - Essential non- toxic (>100 mg/L)
Proprietary Component E	Acute Category III - Essential non-toxic (>100 mg/L)	Acute Category III - Essential non-toxic (>100 mg/L)	No information available	Acute Category III - Essential non- toxic (>100 mg/L)
Proprietary Component F	EC3 - Algae - Scenedesmus quadricauda - 10000 mg/l, 8 days	LC50 - fish - Oncorhynchus mykiss - 54000 mg/l, 96 hours	EC3 - Cyanobacteria - Microcystis aeruginosa - 2900 mg/l, 8 days	EC50 - Daphnia (Common water flea) - 10000 mg/L - 24 hours
Proprietary Component G	No data available	No data available	No data available	Similar compounds are known to be

				toxic to aquatic invertebrates.
Proprietary Component H	EC50 - Algae - > 100 mg/L	LC50 - Fish - > 100 mg/L	No data available	EC50 - Daphnia magna - > 100 mg/L

PERSISTENCE AND BIODEGRADABILITY

No specific data on persistence and biodegradability is available for this mixture. Persistence and biodegradability data on hazardous components >1.0% total concentration is given below:

Component	Persistence and Biodegradability
Geraniol 980	Aerobic Chemical Oxygen Demand - 80-100% - Readily Biodegradable (OECD Test Guideline 301A)
Peppermint Oil	Some constituents classify as: very toxic or toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Proprietary Component D	Aerobic Chemical Oxygen Demand - 80-100% - Readily Biodegradable (OECD Test Guideline 301A)
Proprietary Component E	Biodegradable
Proprietary Component F	Readily biodegradable (OECD 301)
Proprietary Component H	Not readily biodegradable

BIOACCUMULATIVE POTENTIAL

No specific data on bio accumulative potential is available for this mixture. Data on bioaccumulate potential for hazardous components >1.0% total concentration is given below:

Component	Bioaccumulative Potential
Rosemary Oil	No further relevant information available
Peppermint Oil	The main constituents of this Natural Chemical Substance (NCS) are readily or inherently biodegradable.
Proprietary Component D	Not expected to bioaccumulate.
Proprietary Component E	Low bioaccumulation potential, accumulation in organisms is not expected
Proprietary Component F	Not expected to bioaccumulate.
Proprietary Component G	May bio-accumulate in aquatic organisms

MOBILITY IN SOIL

No specific data on soil mobility is available for this mixture. Data on soil mobility for hazardous components >1.0% total concentration is given below:

Component	Mobility in Soil
Proprietary Component D	Spillage may lead to penetration in soil but no evidence that will cause adverse ecological effects.
Proprietary Component E	Low potential for sorption to soil
Proprietary Component F	Not expected to bioaccumulate.
Proprietary Component G	May partition into air, soil, and water

OTHER ADVERSE AFFECTS

No specific data on other adverse effects is available for this mixture.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

WASTE DISPOSAL METHOD

- : DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste

characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. TRANSPORT INFORMATION

14.1. UN number

UN NUMBER : UN1993

14.2. UN proper shipping name

PROPER SHIPPING NAME (DOT) : Flammable liquid, n.o.s. (Essential Oils)

PROPER SHIPPING NAME (IMDG) : Flammable liquid, n.o.s. (Essential Oils)

PROPER SHIPPING NAME (IATA) : Flammable liquid, n.o.s. (Essential Oils)

14.3. Transport hazard class(es)

TRANSPORT HAZARD CLASS (DOT) : 3

TRANSPORT HAZARD CLASS (IMDG) : 3

TRANSPORT HAZARD CLASS (IATA) : 3

14.4. Packing groups

PACKING GROUP (DOT) : III

PACKING GROUP (IMDG) : III

PACKING GROUP (IATA) : III

14.5. Environmental hazards

ENVIRONMENTAL HAZARADS : Harmful to aquatic life with long-lasting effects

MARINE POLLUTANTS : No

OTHER INFORMATION : No supplementary information available

15. REGULATORY INFORMATION

15.1 United States TSCA Inventory (TSCA)

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

16.1. Prepared by

SDS PREPARED BY : EcoSafe Natural Products Inc.
16-6782 Veyaness Road, V8M 2C2
Saanichton, B.C., Canada

16.2. Revision date

REVISION DATE : 17 June 2022

REVISION COMMENT : Prepared SDS

16.3 Disclaimer

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