Elegant Processes.
Sustainable Products.

SAFETY DATA SHEET

in accordance with the requirements of US 29 CFR 1910.1200

1. Product and Company Identification

Product Name: CitroVisc™ 5000

Version #01: 2/26/2021

Supplier:
P2 Science Inc.
4 Research Drive
Woodbridge, CT 06525
USA
Phone: +1 (203) 821-7457
www.p2science.com

Use: Ingredient in consumer products

24-Hour Emergency Assistance **CHEMTREC: +1-800-424-9300**

2. Hazards Identification

2.1. Classification according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Rev. 8:

Not classified - No known hazards

2.2. GHS Label Elements: Not a dangerous substance according to GHS.

2.3. Other Hazards: None known.

3. Composition/Information on Ingredients

This product is a blend of two ingredients, identified below. The percentage composition is proprietary.

Chemical Name	Synonym(s)	CAS Number
6-octen-1-ol, 3,7-dimethyl-, homopolymer	Polycitronellol	888224-71-3
Glycerides, C16-18 and C18-unsaturated	Hydrogenated Vegetable Oil	67701-30-8

4. First Aid Measures

Inhalation
If not breathing, give artificial respiration. Consult a physician.

Skin Contact
Wash off with soap and plenty of water. Consult a physician.

Eye Contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire Fighting Measures

Suitable extinguishing media
Dry chemical, carbon dioxide, water spray, fog or foam.

Special protective equipment for firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides

6. Accidental Release Measures

Personal precautions
Use eye protection and gloves. Avoid breathing aerosol if present.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Use suitable absorbent material. Place in suitable, closed containers for disposal.

7. Handling and Storage

Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Conditions for safe storage
Keep container tightly closed in a cool and well-ventilated place.

8. Exposure Controls/Personal Protection

Control Parameters
Contains no substances with occupational exposure limit values.

Personal protective equipment

- **Respiratory protection:** Product is not volatile. No respiratory protection required unless there is a risk of exposure to aerosols. In that case, use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- **Hand protection:** Product is not considered a skin irritant. However, to avoid any potential concerns, handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- **Eye protection:** Product is not an eye irritant. However, as a precautionary measure use tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN (EU).
- **Skin and body protection:** Product is not a skin irritant. Therefore, skin and body protection are not necessary. However, if product is splashed on clothes or skin, remove contaminated clothing and wash with soap and water.
- **Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

9. Physical and Chemical Properties

Appearance

Form:	Free flowing liquid
Color:	Opaque
Odor:	No data available
Melting point/freezing point:	No data available
Boiling point range:	No data available
Flash point:	> 180°C
Evaporation rate:	No data available
Flammability:	No data available
Autoignition temperature:	No data available
Lower explosion limit:	No data available
Upper explosion limit:	No data available
Vapor pressure:	No data available
Density (g/mL):	0.890 – 0.970
Water solubility:	Virtually insoluble
Other solubility:	No data available
pH:	No data available
Viscosity (dynamic)	4200-5200 mPa.s at 21°C

Partition Coefficient (n-octanol:water)	No data available
Refractive Index @ 20°C:	1.4 – 1.5
Surface Tension (mN/m):	25 – 35

10. Stability and Reactivity

Chemical stability
Stable under recommended storage conditions.

Possibility of hazardous reactions
No data available

Conditions to avoid
No data available

Materials to avoid
Strong oxidizing agents, Strong reducing agents, Strong bases

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. Toxicological Information

Acute toxicity:	No data available for Polycitronellol. Hydrogenated Vegetable Oil
(Dermal, Oral, Inhalation LD_{50}) substances/products of a	LD_{50} > 2000 mg/kg (rat) based on data from similar structure or composition (information from Safety Data Sheet provided by supplier of Hydrogenated Vegetable Oil).
Skin corrosion/irritation:	Not classified. Polycitronellol did not produce any skin irritation in a Human Repeat Insult Patch Test (HRIPT) in 103 subjects. In addition, it was predicted to be a non-irritant in an EpiDerm™ Skin Irritation Test (OECD 439). Hydrogenated Vegetable Oil not classified as irritating to skin based on slight irritation observed in rabbit skin irritation study with substances/ products of a similar structure or composition (information from Safety Data Sheet provided by supplier of Hydrogenated Vegetable Oil).
Skin sensitization:	Not classified. Polycitronellol did not exhibit any skin sensitization potential in a Human Repeat Insult Patch Test (HRIPT) with 103 subjects. In addition, it was found negative for skin sensitization in three in vitro assays:

Result	Species/Test System	Source
Negative for skin sensitization	Direct Protein Reactivity Assay (OECD TG 442C)	Third Party Testing
Negative for skin sensitization	Human Cell Line Activation Test (h-CLAT; OECD TG 442E)	Third Party Testing
Negative for skin sensitization in structurally related material Polycitronellol Acetate	SENS-IS	Third Party Testing

Hydrogenated Vegetable Oil demonstrated no evidence of skin sensitizing potential (statement from Safety Data Sheet provided by supplier of Hydrogenated Vegetable Oil).

Respiratory sensitization: No data available.

Serious eye damage/eye irritation: Not classified. Polycitronellol not considered an eye irritant based on testing with structurally related material (Polycitronellol Acetate) in Bovine Corneal Opacity Assay (OECD TG 437). Hydrogenated Vegetable Oil not irritating to eyes based on rabbit eye irritation study with substances/ products of a similar structure or composition (information from Safety Data Sheet provided by supplier of Hydrogenated Vegetable Oil).

Phototoxicity: Polycitronellol was negative for phototoxicity based on testing with structurally related material (Polycitronellol Acetate) in 3T3 Neutral Red Uptake Assay (OECD TG 432). No data available for Hydrogenated Vegetable Oil.

Genetic Toxicity Not classified. Polycitronellol negative based on testing with structurally related material (Polycitronellol Acetate) in Bacterial Reverse Mutation Test (OECD TG 471) and in vitro Mammalian Cell Micronucleus Test (OECD 487). Hydrogenated Vegetable Oil does not suggest a specific alert for genetic toxicity based on its structure; in addition, no mutagenicity was observed in Bacterial Reverse Mutation Testing using *Salmonella typhimurium* with substances/ products of a similar structure or composition (information from Safety Data Sheet provided by supplier of Hydrogenated Vegetable Oil).

Carcinogenicity No data available. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, ACGIH, NTP or OSHA.

Reproductive toxicity No data available.

Aspiration hazard Not classified. Based on expert judgement and the fact that Polycitronellol and Hydrogenated Vegetable Oil are not hydrocarbons. In addition, the Safety Data Sheet provided by the supplier of Hydrogenated Vegetable Oil stated no aspiration hazard expected.

Specific target organ toxicity- No data available for Polycitronellol. The Safety Data Sheet

single exposure	provided by the supplier of Hydrogenated Vegetable Oil stated that based on available data the classification criteria are not met.
Specific target organ toxicity-repeated exposure	No data available for Polycitronellol. The Safety Data Sheet provided by the supplier of Hydrogenated Vegetable Oil stated that the information available on the product provides no indication of toxicity to target organs after repeated exposure.

12. Ecological Information

12.1. Toxicity:	No data available for Polycitronellol. For Hydrogenated Vegetable Oil, fish LC50 > 100 mg/L and bacteria EC0 > 100 mg/L based on data from substances/products of a similar structure or composition (information from Safety Data Sheet provided by supplier of Hydrogenated Vegetable Oil).
12.2. Persistence and degradability:	Polycitronellol met the threshold requirements for Inherent Biodegradability in a CO2 Evolution Test (OECD 301B). According to the Safety Data Sheet for Hydrogenated Vegetable Oil provided by the supplier, this substance is readily biodegradable according to OECD criteria.
12.3. Bioaccumulative potential	No data available.
12.4. Mobility in soil:	No data available.
12.5. Other adverse effects:	No data available.

13. Disposal Considerations

Product
Dispose as non-hazardous waste.

Contaminated packaging
Dispose as non-hazardous waste.

14. Transport Information

DOT (US)	Non-regulated
IMDG	Non-regulated
IATA	Non-regulated

15. Regulatory Information

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
No SARA Hazards

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
No components

New Jersey Right To Know Components
No components

California Proposition 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other Information

The above information is believed to be correct but does not purport to be all- inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. P2 Science, Inc, shall not be held liable for any damage resulting from handling or from contact with the above product. It is the user's responsibility to determine the safety, toxicity, and suitability for their own use of the product described herein.

Date of Last Change: February 26, 2021