Elegant Processes.
Sustainable Products.

SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Citropol® V5

Version #03: 10/19/2020

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

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable Liquids	Category 4
Aspiration Toxicity	Category 1

Label Elements

Signal Word
Danger
Hazard Statements
Combustible liquid
May be fatal if swallowed and enters airways

Precautionary Statements
Prevention
Keep away from flames and hot surfaces. – No smoking.
Wear protective gloves/eye protection/face protection
Response
In case of fire: Use CO2, dry chemical or foam to extinguish.
If swallowed: Immediately call a poison center or physician. Do NOT induce vomiting.
Storage
Store locked up in a well-ventilated place. Keep cool.
Disposal
Dispose of contents/container to an approved waste disposal facility.

3. Composition/Information on Ingredients

Citropol® V5 is a proprietary blend of three components:

- Polycitronellol Acetate (CAS# 2417284-25-2)
- Undecane (CAS# 1120-21-4)
- Tridecane (CAS# 629-50-5)

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
Immediately call a poison center or physician. Do NOT induce vomiting.

5. Fire Fighting Measures

Suitable extinguishing media
Dry chemical, carbon dioxide 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 face and 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, locked 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 workday.

9. Physical and Chemical Properties

Appearance

Form:	Liquid
Color:	Colorless to light yellow
Odor:	Odorless
Melting point/freezing point:	No data available
Boiling point range:	No data available
Flash point:	77° C +/- 2
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:	Approx. 0.810g/cm^3 at 25°C
Water solubility:	Virtually insoluble
Other solubility:	Alcohols and oils
pH:	4.0-7.0
Viscosity (dynamic)	2.5-5.0 mPa.s at 25°C
Viscosity (kinematic)	6.5-9.0 mm^2/s at 25°C
Partition Coefficient (n-octanol:water)	No data available
Thermal decomposition	No data available

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. However, based on available information on the
(Dermal, Oral, Inhalation LD $_{50}$)	components (test data and in silico modeling), product is not expected to be acutely toxic by the oral or dermal routes.
Skin corrosion/irritation:	No data available. However, based on available test data on the components, product is not expected to cause skin

	irritation or corrosion.
Skin sensitization:	No data available. However, based on available test data on the components, product is not expected to induce skin sensitization.
Respiratory sensitization:	No data available.
Serious eye damage/eye irritation:	No data available. However, based on available test data on the components, product is not expected to cause serious eye damage or eye irritation.
Phototoxicity:	No data available. However, based on available test data on the components, product is not expected to induce phototoxicity.
Germ cell mutagenicity and clastogenicity	No data available. However, based on available test data on the components, product is not expected to be mutagenic or genotoxic.
Carcinogenicity	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	May be fatal if swallowed and enters airways.
Specific target organ toxicity-single exposure	No data available.
Specific target organ toxicity-repeated exposure	No data available.

12. Ecological Information

Toxicity:	No data available.
Persistence and degradability:	No data available. However, undecane and tridecane are readily biodegradable and polycitronellol acetate is inherently biodegradable.
Bioaccumulative potential	No data available.
Mobility in soil:	No data available.
PBT and vPvB assessment:	No data available.
Other adverse effects:	No data available.

13. Disposal Considerations

Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

14. Transport Information

DOT (US)	Material considered to be Combustible Liquid
IMDG	Not regulated
IATA	Not 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.

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