



6 Powder Horn Dr.
Warren, NJ 07059, USA
Telephone: +1 732-764-0900

SAFETY DATA SHEET

1. Product Identification

Product Name CyclaSolv™ PFC180
Chemical Name PERFLUOROTRIBUTYLAMINE
Alternative Names Fluorinert Electronic Liquid FC-43
Provider Chromis Technologies
Physical Address 6 Powder Horn Dr. Warren, NJ 07059, USA
Telephone +1 732-764-0900

2. Hazard Identification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

3. Composition, Information or Ingredients

Substances	CAS No.	%
Perfluorotributylamine	311-89-7	100

4. First Aid Measures

Inhalation:

No need for first aid is anticipated.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If Swallowed:

No need for first aid is anticipated.

5. Fire-Fighting Measures

Extinguishing media: Carbon dioxide, dry chemical powder, alcohol, or polymer foam.

Special fire fighting procedures:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosion hazards / decomposition of product:

Emits toxic fumes (HF) under fire conditions.

6. Accidental Release Measures

Steps to be taken if material is spilled or otherwise release into the environment

No special environmental precautions required. Clean up promptly and collect spilled material with an absorbent. Collect in suitable container for disposal.

7. Handling and Storage

Protect from contamination. When opening containers, avoid breathing vapors that may be emanating. Provide appropriate exhaust ventilation at dryers, machinery and at places where dust or volatiles can be generated. Keep container tightly closed. Keep away from heat and sunlight.

8. Exposure Controls and Personal Protection

Wear protective safety goggles.
Wear chemical-resistant gloves.
Wear protective clothing and chemical resistant boots.
Ensure ventilation during use.
After contact with skin, wash immediately.

9. Physical and Chemical Properties

General Physical Form: Liquid
Specific Physical Form: Liquid
Odor, Color, Grade: Colorless, odorless liquid.
Odor threshold: No Data Available
pH: Not Applicable
Melting point: Not Applicable
Boiling Point: 165 - 185 °C
Flash Point: No flash point
Evaporation rate: > 1 [Ref Std:BUOAC=1]
Flammability (solid, gas): Not Applicable
Flammable Limits(LEL): None detected
Flammable Limits(UEL): None detected
Vapor Pressure: 1.3 mmHg [@ 20 °C]
Vapor Density: 23.3 [@ 20 °C] [Ref Std:AIR=1]
Density: 1.9 g/ml
Specific Gravity: 1.9 [Ref Std:WATER=1]
Solubility in Water: Nil
Solubility- non-water: No Data Available

Partition coefficient: n-octanol/ water No Data Available
Autoignition temperature: No Data Available
Decomposition temperature: Not Applicable
Viscosity: 2.8 centistoke [@ 20 °C]
Molecular weight: No Data Available
Volatile Organic Compounds [Details:Exempt]
Percent volatile: 100 %
VOC Less H2O & Exempt Solvents [Details:Exempt]

10. Stability and Reactivity

Conditions to avoid: To avoid thermal decomposition, do not overheat. Hazardous decomposition products may be produced when the recommended processing temperatures or times are exceeded. Do not expose to alkali metals (Na, K, Li).

Hazardous Decomposition

Products: None. During drying, cleaning, and molding, small amounts of hazardous gases and/or particular matter may be released. These may irritate eyes, nose and throat. Large molten masses may give off hazardous gases. No decomposition if used as directed.

11. Toxicological Information

Acute inhalation toxicity: Oral LD50 rat > 10 g/kg (perfluorotributylamine)

Dermal: n/d

Skin corrosion/irritation: n/d

Sensitization: n/d

Repeated dose toxicity: n/d

Mutagenicity/carcinogenicity: n/d

NTP: n/e

IARC: n/e

OSHA: n/e

Cytogenetic test: n/d

12. Ecological Information

Toxicity: LC50, 48 h, fish (Himedaka) > 500 mg/L (perfluorotributylamine)
LC50, 96 h, fish (Fathead Minnow) > 1,000 mg/L (perfluorotributylamine)

Persistence and degradability: BOD = 0-10%

Bioaccumulative potential: bioconcentration factor 19-34 L/kg (0.01 mg/L)

13. Disposal Considerations

Absent other actions demanded by federal or local regulations – dissolve or mix the material with a combustible solvent and burn in a regulated, chemical incinerator equipped with after-burner and scrubber.

Observe all federal, state, and local laws.

14. Transport Information

US DEPARTMENT OF TRANSPORTATION (DOT)

Hazardous Materials:	N/A
Hazardous Materials Description and Proper Shipping Name:	N/A
Hazard Class or Division:	N/A
Identification Number:	Not regulated
Packing Group:	N/A
Label(s) required:	Not classified
UN Number:	Not regulated
IMDG Status:	Not restricted
Marine Pollutant:	No
ICAO/IATA Status:	Not restricted

15. Regulatory Information

OSHA STATUS:	N/A
TSCA STATUS:	Perfluorotributylamine is listed on the TSCA inventory

16. Other Information

The information contained herein is accurate to the best of our knowledge, but is not meant to be complete and is included only as a guide. The end user is responsible for any damage resulting from handling or from contact with this product.