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

SAFETY DATA SHEET

1. Product Identification

Product Name	CyclaSolv® PFC100
Chemical Name	Perfluoro 1, 2-dimethyl cyclohexane
Provider	Chromis Technologies
Physical Address	6 Powder Horn Dr. Warren, NJ 07059, USA
Telephone	+1 732-764-0900

2. Hazard Identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Irritant, skin	(Category 2)
Irritant, eye	(Category 2)
Specific target organ toxicity – single exposure	(Category 3A)

2.2 GHS Label Elements, including precautionary statements

Pictogram 

Signal word: Warning

Hazard statement(s)

H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Precautionary statement(s)

P261	Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.

P280	Wear protective gloves/ eye protection/ face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water
P304 + P340	IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep the container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None.

3. Composition, Information or Ingredients

Substances	CAS No.	Wt %
Perfluoro 1, 2-dimethyl cyclohexane	306-98-9	>98
Formula: C_8F_{16}		
Molecular Weight: 400.06 g/mol		

4. First Aid Measures

4.1 Description of first-aid measures

General advice

Move out of the dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move the person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

In case of skin contact

Wash off with soap and plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

In case of eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers.

If swallowed

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth

with water. Allow the victim to drink 2-4 cups of water. Call the Poison Control Center.

4.2 Most important symptoms and effects, both acute and delayed

See Sections 2.2 and 11

4.3 Indication of any immediate medical attention and special treatment needed

Note to physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, dry chemical powder, polymer foam, or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Releases toxic fumes of carbon oxides and hydrogen fluoride.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency measures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to enter drains. If necessary, dike ahead of spill to prevent runoff into drains, sewers, or natural waterway or drinking supply.

If applicable, If a spill / release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the US at 1-800-424-8802.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose it as hazardous waste. Keep in suitable, closed containers for disposal. Contaminated absorbent material may pose the same hazards as the spilled product. Follow local regulations.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and Storage

7.1 Precautions for safe handling

For precautions, see Section 2.2.

Do not handle it until all safety precautions have been read and understood. Wear protective gloves and eye/face protection. Use only in well-ventilated areas. Avoid inhalation of vapor or

mist. Avoid contact with skin, eyes, and clothing. Keep away from heat and open flames. Do not eat, drink, or smoke when using this product. Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep the container tightly closed. Store in a cool, dry, and well-ventilated place. Empty containers retain residue (powder and/or vapor) and can be dangerous. Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances (see Section 10.5).

7.3 Specific use(s)

No specific uses are stipulated

8. Exposure Controls/ Personal Protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls.

Use only in well-ventilated areas. Provide local exhaust or a process enclosure ventilation system. Avoid contact with skin, eyes and clothing.

Personal protective equipment

Eye/face protection

Wear safety glasses or chemical safety goggles and face shield. Provide an emergency eye wash station and quick drench shower in the immediate work area.

Skin protection

Handle with appropriate chemical-resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the 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.

Body protection

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let the product enter drains.

General hygiene considerations

Do not breathe vapors. Avoid contact with skin, eyes, and clothing. Do not eat, drink, or

smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

a) **Appearance**	Clear colorless liquid
b) **Odor**	Odorless
c) **Odor threshold**	N/A
d) **pH**	N/A
e) **Melting/freezing point**	N/A
f) **Initial boiling point/range**	103 °C @ 1mmHg
g) **Flash point**	N/A
h) **Evaporation rate**	N/A
i) **Flammability (solid, gas)**	N/A
j) **Upper/lower flammability or explosive limits**	N/A
k) **Vapor pressure**	N/A
l) **Vapor density**	N/A
m) **Relative density**	1.861 g/cm3 at 25 °C (77 °F)
n) **Solubility**	N/A
o) **Partition coefficient**	N/A
p) **Auto-ignition temperature**	N/A
q) **Decomposition temperature**	N/A
r) **Viscosity**	N/A
s) **Explosive properties**	N/A
t) **Oxidizing properties**	N/A

9.2 Other safety information

N/A

10. Stability and Reactivity

10.1 Reactivity

No unusual reactivity. See Section 10.5.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reaction

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Hazardous polymerization does not occur.

Releases toxic fumes of carbon oxides and hydrogen fluoride.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity

May cause irritation of the respiratory tract, eyes, and skin.

Skin corrosion/ irritation

No data available

Serious eye damage/ irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 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: No component of this product present at levels greater than or equal to 0.1 % is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

No data available

Specific target organ toxicity -- repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional information

RTECS: Not available

To the best of our knowledge, the acute and chronic toxicity of this substance is not fully known

12. Ecological Information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

No data available

13. Disposal Considerations

13.1 Waste treatment methods

Product

Refer to protective measures listed in Sections 7 and 8.

Dispose of in accordance with all applicable federal, state, and local regulations.

Place in a chemical secured landfill or incinerate at 1200°C with a 2 second dwell time or at 1600°C with a 1.5 second dwell time. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Empty containers retain residue and can be dangerous. Disposal must be made according to official regulations.

14. Transportation Information

DOT (US) / IMDG / IATA

Not classified as hazardous for transport

15. Regulatory Information

US federal information

Not on TSCA inventory, for R&D use only

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. Chromis Technologies shall not be held liable for any damage resulting from handling or from contact with the above product.