

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

1.1 Product Identifier

Product Name: **Pro Cad**

REACH Registration No: No data available

Synonyms: N/A

Trade Names: **Pro Cad**


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


Main Applications (non exhaustive list):
Barrier liquid for resin casting

1.3 Details of the supplier of the Safety Data Sheet

Company Name: Goodwin Refractory Services Ltd

Address: Spencroft Road, Newcastle-under-Lyme, Staffordshire, ST59JE, UK

Phone No. (0)1782 663600 

Fax No. (0)1782 663611 

Email address: info@grscastingpowders.com

1.4 Emergency telephone number:

Emergency Telephone No. +44 (0)1782 663600

Available outside office hours? No

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Chronic aquatic toxicity (category 3) H412



WARNING

2.2 Label elements:

Signal Word: Warning

Hazard Statements:

H412- Harmful to aquatic life with long lasting effects

H319 - Causes serious eye irritation

H315 - Causes skin irritation

H335 - May cause respiratory irritation

Precautionary Statements:

P273 - Avoid the release to the environment.

2.3 Other Hazards: None.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixture

	CAS	%
Decafluoropentane	138495-42-8	85-95%
Polvtetrafluororoethyle	902-84-0	>3%
H2O	N/A	0-2%

4. FIRST AID MEASURES

Description of first aid measures:

General advice - Consult a physician, refer to this MSDS.

Eye contact - Flush eyes with water as a precaution.

Skin contact - Wash off with soap and water, consult a physician.

Inhalation - In breathed in move person to fresh air, if not breathing give artificial respiration. Consult a physician.

Ingestion- If swallowed do not induce vomiting, immediately rinse mouth with water. Consult a physician.

4.1 Most important symptoms and effects both acute and delayed

The most important known symptoms and effects are described in section 2.2 and section 11.

4.2 Indication of any immediate medical attention and special treatment needed:

No data

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Water spray, alcohol resistant foam or carbon dioxide or dry chemical.

5.2 Special hazards arising from the substance or mixture:

Carbon oxides/ Hydrogen fluoride.

5.3 Advice for firefighters:

No data available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective and emergency procedures:

Avoid breathing vapours, mist or gas. Ensure adequate ventilation of recommended 10-15 air changes per hour.

For PPE, see section 8.

Methods and material for containment and cleaning up:

Keep in a sealed contain ready for disposal.

Prevent leakage/ spillages if safe to do so. Do not let the product enter the drains. Discharge into the environment must be avoided.

6.3 Reference for other sections:

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Normal measures for prevention of fire protection.

7.2 Conditions for safe storage, including any incompatibilities:

Store in a cool place. Keep container tightly closed in a dry well ventilated area.

7.3 Specific end use (s):

Barrier liquid for resin casting.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

Contains no substance with occupational exposure limit values.

8.2 Exposure controls:

Contains no substance with occupational exposure limit values.

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye/face protection: Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection: 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. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.2 mm Break through time: 480 min

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 240 min

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 not required.

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:	Opaque Appearance
Odor:	Odorless
Odor threshold:	No components are considered hazardous.
pH	No data available.
Melting point/ freezing point:	No components are considered hazardous.
Initial Boiling point:	No components are considered hazardous.
Flash point:	No components are considered hazardous.
Evaporation rate:	No components are considered hazardous.
Flammability:	No components are considered hazardous.
Upper/ lower flammability exposure limit:	No components are considered hazardous.

Vapour pressure:	No components are considered hazardous.
Relative density:	No components are considered hazardous.
Water solubility:	No data available.
Partition coefficient:	No components are considered hazardous.
Auto ignition temperature:	No components are considered hazardous.
Decomposition temperature:	No components are considered hazardous.
Viscosity:	No components are considered hazardous.
Explosive Properties:	No components are considered hazardous.
Oxidising properties:	No components are considered hazardous.

9.2 Other information:

The above information applies only to the material as supplied. Your application of this product may change the chemical characteristics.

This product is exempt from REACH registration.



10. STABILITY AND REACTIVITY

- 10.1 Reactivity:** No hazardous reactions.
10.2 Chemical Stability: Chemically stable under recommended conditions.
10.3 Possibility of hazardous reactions: No hazardous reactions.
10.4 Conditions to avoid: No data available.
10.5 Incompatible materials: Strong oxidising agents, alkaline earth metals and strong bases.
10.6 Hazardous decomposition products: In the event of a fire, see section 5.

11. TOXICOLOGY INFORMATION

11.1 Information on toxicology effects:

Acute toxicity LD50 Oral - rat - > 5,000 mg/kg
Remarks: Nutritional and Gross
Metabolic: Weight loss or decreased weight gain.
LD50 Dermal - rabbit - > 5,000 mg/kg Remarks: Prolonged skin contact may cause skin irritation and/or dermatitis.
Skin corrosion/irritation: Substance caused a mild irritation of eyes and skin in animal experiments.
Serious eye damage/eye irritation: Substance caused a mild irritation of eyes and skin in animal experiments.
Respiratory or skin sensitisation: 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.
Reproductive toxicity: Reproductive toxicity - rat - Inhalation Maternal Effects: Other effects.

12. ECOLOGICAL INFORMATION

- 12.1 Toxicity:** Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 27.2 mg/l - 96 h LC50 - Oncorhynchus mykiss (rainbow trout) - 13.9 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates LC50 - Daphnia magna (Water flea) - 11.7 mg/l - 48 h
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 Harmful to aquatic life with long lasting effects. no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Offer surplus and non-recyclable solutions to a licensed disposal company.
Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

- 14.1 UN Number:** No data available.
14.2 UN proper shipping name: No data available.
14.3 Transport hazard class(es):
 ADR: Not dangerous goods.
 IMDG: Not dangerous goods.
 ICAO/IATA: Not dangerous goods.
 RID: Not dangerous goods.
14.4 Packing group: Not dangerous goods.
14.5 Environmental hazards: H412– Harmful to aquatic life with long lasting effects.
14.6 Special precautions for user: No data available.
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not dangerous goods.

15. REGULATORY INFORMATION

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**
 Safety, health and environment regulations - No data available
 Chemical safety assessment - No data available
15.2 Chemical safety assessment:
 No data available.

16. OTHER INFORMATION

Training:

Employees must be trained in the proper use and handling of this product as required under applicable regulations.

Regulatory information:

Safety, health and environment regulations– No data available
 Chemical safety assessment– No data available

Liability:

Such information given on this Material Safety Data Sheet is to the best of Goodwin Refractory Services' knowledge and belief, accurate and reliable as of the date indicated. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy itself as to the suitability and completeness of such information for their own particular use.

Indication of the changes made to the previous revision of the SDS:

08/11/2012 - First Issue
 14/09/2015 - Rev 02
 30/09/2015 - Rev 03– Updated to comply with current legislation.
 07/10/2015 - Rev 04 Amendment to composition
 10/05/2017 - Rev 5 Removal of reference to EC 453/2010, also CAS number added and label element pictogram.
 10/08/2017 - Rev 6 Addition of Polytetrafluoroethylene to complete composition.
 31/08/2017 - Rev 7 Amendment to document layout and e mail contact address changed.
 26/02/2019- Rev 8 Amendment to document following review. Further information added.