

Safety Data Sheet

Date of issue: 5-Oct-18

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product form Filament

Trade name Composite Carbon Fiber HTPLA

Product code HTP2xxxx-CF

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

For use in 3D printers at recommended temperatures

1.3 Details of the supplier of the safety data sheet

Proto Plant

12001 NE 60th Way, B-2 Vancouver, WA 98682 www.proto-pasta.com

Emergency telephone number: 503-877-5268

Section 2: Hazards identification

2.1 Classification of the substance or mixture

No classified

2.2 Label elements

No labeling applicable

2.3 Other hazards

No additional information applicable

2.4 Unknown acute toxicity (GHS US)

Not applicable

Section 3: Composition/Information on ingredients

3.1 Substances/Mixtures

Chemical Name	CAS No	Weight %
Polyactide resin	9051-89-2	<90
Carbon fiber	7440-44-0	<9.49

Section 4: First-aid measures

4.1 Description of first-aid measures

First-aid measures after

Inhalation Most to fresh air. If irritation persists, seek medical attention.

Skin contact Wash with soap and water. For thermal burns, immediately flush with cold

water. Do not attempt to remove polymer from skin. Obtain medical

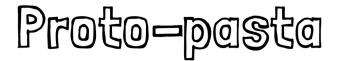
attention.

Eye contact First aid not likely required. Flush with water. Consult physician is symptoms

persist.

Ingestion Obtain immediate medical attention. For poison emergency in the US,

call 1-800-222-1222



Safety Data Sheet

Date of issue: 5-Oct-18

4.2 Most important symptoms and effects, both acute and delayed

No additional information available

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing data Water spray, dry powder, foam

5.2 Special hazards arising from the substance or mixture

Burning produces obnoxious and toxic fumes

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

6.1.1 For non-emergency personnel

Sweep up to prevent slipping hazard

6.1.2 For emergency responders

Wear protective gear

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water systems.

6.3 Methods and material for containment and cleaning up

Clean up promptly with scoop or vacuum. Sweep up and shovel into suitable containers for disposal.

6.4 Reference to other sections

No additional information available

Section 7: Handling and Storage

7.1 Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Wear personal

protective equipment.

Hygiene measures Do not eat, drink, or smoke when using this product. Always wash

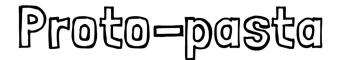
hands after handling the product.

7.2 Conditions for safe storage, including any incompatibles

Store in a well-ventilated place. Keep cool.

7.3 Specific end use(s)

No additional information available



Safety Data Sheet

Date of issue: 5-Oct-18

Section 8: Exposure controls/personal protection

8.1 Control parameters

Where reasonably practicable, use local exhaust ventilation and good general extraction. Provide appropriate exhaust ventilation in places where dust is formed.

8.2 Exposure controls

Hand protection Protective gloves

Eye protection Safety glasses

Skin and body protection Impervious clothing

Respiratory protection In case of insufficient ventilation, wear suitable respiratory

equipment

Environmental exposure controls Avoid release into the environment

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state Solid

Appearance Monofilament plastic, thin strand

Color Black

Odor Light, sweet odor during processing; none at room temperature

Odor threshold

pH

Not applicable

Not applicable

Melting point

195-225C

Freezing point

Not applicable

Boiling point

Not applicable

Flash point

Relative evaporation rate

Not applicable

Flammability Combustible if heated

Explosion limits

Explosive properties

Oxidizing properties

Vapor pressure

Not applicable

Not applicable

Not determined

Relative density 1.15 g/cc

Relative vapor density at 20C Not determined

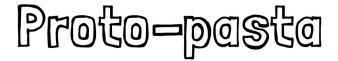
Solubility Insoluble

Log Pow Not determined
Log Kow Not determined
Auto-ignition temperature 300-400C

Decomposition temperature 250C

Viscosity Not applicable
Viscosity, kinematic Not applicable
Viscosity, dynamic Not applicable

9.2 Other information



Safety Data Sheet

Date of issue: 5-Oct-18

No other information available

Section 10: Stability and reactivity

10.1 Reactivity

Stable when stored as recommended

10.2 Chemical Stability

Stable when stored/used as recommended

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

Temperatures above 230C

10.5 Incompatible materials

Oxidizing agents, strong acids, strong bases.

10.6 Hazardous decomposition products

Burning produces obnoxious and toxic fumes. Aldehydes, carbon monoxide, carbon dioxide

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity None known

Skin corrosion/irritation Contact with molten material may cause thermal burns

Serious eye damage/irritation Contact with dust/fumes may cause irritation

Respiratory or skin sensitization None known
Germ cell mutagenicity Not determined
Carcinogenicity Not classified
Reproductive toxicity Not classified
STOT-single exposure Not determined
STOT-repeated exposure Not determined
Aspiration hazard None known

Section 12: Ecological information

12.1 Toxicity

Not determined

12.2 Persistence and degradability

Not determined

12.3 Bioaccumulative potential

Not determined

12.4 Mobility in soil

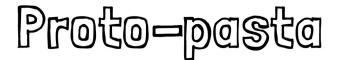
Not determined

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Other adverse effects

No other information available



Safety Data Sheet

Date of issue: 5-Oct-18

Section 13: Disposal considerations

13.1 Waste treatment methods

In accordance with local and national regulations. Do not contaminate ponds, waterways, or ditches with chemical or used container. For recycling, contact local waste disposal centers.

Section 14: Transport information

Not regulated under the US Department of Transportation

Section 15: Regulatory information

15.1 US Federal regulations

SARA 313: None IARC: None

15.2 International regulations

Components are in compliance and/or are listed

15.3 US State regulations

Prop 65: None

Right to Know Hazardous Substance List-New Jersey: None

Section 16: Other information

Prepared byProtoplant IncReason for RevisionGHS complianceRevision Date10/05/2018

<u>Disclaimer:</u> The information provided in this SDS is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release, and is not to be considered as a warranty or quality specification. The health and safety precautions contained herein may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely, and to comply with all applicable laws and regulations. Nothing contained herein shall be construed as a license for the use of any product in a manner that would infringe existing patents. The information relates only to the specific material designated, and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.