



SAFETY DATA SHEET

Date of issue: 07.02.2023 r

Version: 2.1/EN

[Has been drawn up in accordance with Regulation EC 1907/2006 (REACH) with later amendments]

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

1.1 Product identifier

Product name: PROGRAFEN PLA GRAPHENE STRONG

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

Relevant identified uses: Graphene Enhanced 3D Filament**Uses advised against:** No data available

1.3 Details of the supplier of the safety data sheet:

Supplier: Advanced Graphene Products S.A.**Street address:** Nowy Kisielin - Antoniego Wysockiego 4**Country/Postcode:** Poland, 66-002 Zielona Góra**Telephone number:** +48 68 328 20 10**E-mail:** administracja@agp-corp.com

1.4 Emergency telephone number: 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP) The product is not classified as hazardous. Based on section 1.3.4.1 of Annex I to CLP the product does not need to be labeled

2.2 Label elements

Supplemental information on the label:

Not applicable

Hazard pictograms:

The product does not need to be labeled.

Signal word:

The product does not need to be labeled.

Hazard statements:

The product does not need to be labeled.

Precautionary statements:

The product does not need to be labeled.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This material can generate Particulates Not Otherwise Classifiable (PNOC). Avoid dust formation.

SECTION 3: Composition/information on ingredients

3.1 Substances: Not applicable**3.2 Mixtures:**

Chemical name and CAS number
Polylactic acid, CAS: 9051-89-2
Graphene, CAS: 1034343-98-0



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SECTION 4: First aid measures

4.1. Description of first aid measures

Eye Contact:

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention.

Inhalation:

Move to fresh air. Seek medical attention if you feel unwell or if exposure prolonged.

Skin Contact:

No adverse reactions are expected in case of skin contact. If irritation occurs wash the skin with a stream of water and get medical attention. In case of contact with hot polymer, immediately cool skin with cold water. Do not try to remove hot polymer from skin or contaminated clothing. Get medical attention.

Ingestion:

If the person is conscious, give water, do not induce vomiting. Get medical attention.

4.2. Most important symptoms and effects, both acute and delay

No information available.

4.3. Indication of any immediate medical attention and special treatment need

Directions for the doctor: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Foam, carbon dioxide and dry powder

Unsuitable extinguishing media: Do not use water jet as an extinguisher.

5.2 Special hazards arising from the substance or mixture

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

5.3 Advice for firefighters

Special protective equipment for firefighters:

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

Firefighting Instructions

Cool containers exposed to flames with water until well after the fire is out. If possible remove containers from the danger zone. Prevent from spreading or entering drains, ditches or rivers. Dispose of released and contained material in accordance with local regulations. Avoid dispersal of dust in the air.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Remove from the danger area all persons not involved in the emergency. If necessary, order the evacuation. Avoid dust formation

6.2 Environmental precautions

Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Local authorities should be advised if any exposure to the environment occurs.



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6.3 Methods and material for containment and cleaning up

Collect mechanically into the waste container. Avoid dust formation. Dispose of waste according to the applicable local and national regulation

6.4 Reference to other sections

See Section 8 for information on personal protective equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use the product in accordance with its intended purpose. Keep away from heat, sparks and open flames. Avoid eye contamination and inhalation of dust. Keep away from food and drinks.

7.2 Conditions for safe storage, including any incompatibilities

Store in original container in a dry, cool and well-ventilated place. Keep away from heat, sparks, sunlight, open flame and smoking. Keep away from oxidizers.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Not applicable

8.2 Exposure controls

Appropriate engineering controls:

It is recommended to use the product in accordance with the principles of occupational health and safety. Provide adequate ventilation

Personal protective equipment:

Eye/face protection

Wear approved chemical safety glasses with side-shields

Skin protection

Hand protection: Use suitable protective gloves to avoid skin contact. In case of hot material: wear heat-resistant protective gloves able to withstand the temperature of the molten product.

Other: Wear appropriate clothing.

Respiratory protection:

Not required with adequate ventilation. When dust is present wear respirator with dust filter.

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Solid filament
Color	Black
Odor	Sweet



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Melting Point Range (°C)	145-160
Auto ignition Temp. (°C)	388
Decomposition Temp (°C)	250
Water solubility	Insoluble
Flammability	Fine dust dispersed in air may ignite
Density	1.24 g/cm ³

9.2. Other information

No data available

SECTION 10: Stability and Reactivity

10.1 Reactivity

Not reactive under normal conditions of storage and use.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to avoid

Avoid electrostatic discharge, high temperatures, direct sunlight, hot surfaces and open fire.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data available

Caustic/irritating effect on the skin

No data available

Serious damage to eyes/ irritating effect on eyes

No data available

Respiratory or skin sensitization

No data available

Mutagenic effect on reproductive cells

No data available

Carcinogenic effect

No data available

Harmful impact on reproduction capacity

No data available

Toxic effect on target organs - one-time exposure

No data available

Toxic effect on target organs - repeated exposure

No data available



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Aspiration hazard

No data available

Additional information

The product should be handled with the caution usual with chemicals.

SECTION 12: Ecological information**12.1 Toxicity**

Based on available data, the classification criteria are not met

12.2 Persistence and degradability

No further relevant information available.

12.3 Bio accumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Do not allow to enter sewers and other water courses. Do not store in landfills. The material should be handed over as waste for utilization or recycling. Waste to be disposed of in accordance with local Waste Disposal Authority. Dispose of waste and residues in accordance with local authority requirements

SECTION 14: Transport Information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1. UN number	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es) label	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards	No	No	No	No
14.6. Special precautions for user	Not applicable	Not applicable	Not applicable	Not applicable
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable	Not applicable	Not applicable	Not applicable



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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH),

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

2014/955/EU: Commission Decision of 18 December 2014 amending Decision 2000/532/EC on the list of waste pursuant to Directive 2008/98/EC of the European Parliament and of the Council Text with EEA relevance

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Additional Information

Mixture indicated only for professional use.

The above data are based on Advanced Graphene Products S.A. current knowledge, and are intended to describe our product with regard to the requirements of safety. Therefore, the data do not imply any guarantee of the technical properties of the product.

The Information is designed only as guidance for the safe handling, storage, processing and/or use of the Product. The Information is correct to the best of the Advanced Graphene Products S.A.'s knowledge and belief at the date of publication. The Advanced Graphene Products is not responsible for the improper use of the information contained in the card.