Version	Revision Date:	SDS Number:	Date of last issue: 19.12.2018
1.1	05.05.2020	100000018393	Date of first issue: 19.12.2018
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : PAHT CARBON FIBER

Product code : FN171-CABK

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

Use of the Substance/Mixture : Thermoplastic high-performance material, High-performance polymer for 3D printing

1.3 Details of the supplier of the safety data sheet

Company : AzureFilm d.o.o.
Orleška cesta 16
6210 Sežana
Slovenia

Telephone : + 386 (0)31 718 800
Responsible/issuing person : info@azurefilm.com

1.4 Emergency telephone number

Telephone : + 386 (0)31 718 800

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : carbon reinforced polyamide

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Never give anything by mouth to an unconscious person.
If unconscious, place in recovery position and seek medical advice.
Give oxygen or artificial respiration if needed.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Do NOT use solvents or thinners.
Wash off with soap and water.
If symptoms persist, call a physician.
Cool melted product on skin with plenty of water. Do not remove solidified product.
In case of burns apply cold water until pain subsides then seek medical advice.

In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Keep eye wide open while rinsing.

If swallowed : If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media : High volume water jet

tainer for disposal.
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Avoid dust formation.

6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Provide for appropriate exhaust ventilation and dust collection at machinery. The material can accumulate static charge and can therefore cause electrical ignition. Minimize dust generation and accumulation. Dust must be collected and disposed of carefully. Wear personal protective equipment. Do not breathe vapours/dust.
Advice on protection against fire and explosion	:	Take measures to prevent the build up of electrostatic charge. During processing, dust may form explosive mixture in air. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing. Keep away from food and drink. General industrial hygiene practice. When using do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Keep containers tightly closed in a dry, cool and well-ventilated place.
Further information on storage conditions	:	Keep away from heat and sources of ignition. Keep away from direct sunlight. Avoid moisture.
Advice on common storage	:	Keep away from food, drink and animal feedingstuffs.
Storage class (TRGS 510)	:	11, Combustible Solids

7.3 Specific end use(s)

Specific use(s)	:	For further information, refer to the product technical data

sheet.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Carbon black	Workers	Inhalation		2 mg/m3
Remarks:	DNEL (long-term rep.)			

8.2 Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.
Handle product only in closed system or provide appropriate exhaust ventilation at machinery.
Apply measures to prevent dust explosions.

Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection
Material : Protective gloves

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.
As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use.
The exact break through time can be obtained from the protective glove producer and this has to be observed.
The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
Request information on glove permeation properties from the glove supplier.
Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work.

Skin and body protection : Safety shoes
Wear suitable protective clothing.

Respiratory protection : Effective dust mask
In the case of vapour formation use a respirator with an approved filter.

Protective measures : Follow the skin protection plan.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	pellets
Colour	:	black
Odour	:	characteristic
Odour Threshold	:	not determined
pH	:	not determined
Melting point/range	:	225 °C
Boiling point/boiling range	:	not determined
Flash point	:	not determined
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	The product is not explosive at itself, but it may form explosive dust
Vapour pressure	:	not determined
Relative density	:	No data available
Density	:	not determined
Solubility(ies)		
Water solubility	:	not determined
Solubility in other solvents	:	not determined
Partition coefficient: n-octanol/water	:	No data available
Ignition temperature	:	not determined
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	Not applicable

Viscosity, kinematic : Not applicable

9.2 Other information

Conductivity : not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : Finely dispersed particles form explosive mixtures with air.
Burning produces noxious and toxic fumes.

10.4 Conditions to avoid

Conditions to avoid : Keep away from heat and sources of ignition.
Avoid dust formation.
Avoid moisture.

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
Nitrogen oxides (NOx)
Ammonia
Hydrogen cyanide (hydrocyanic acid)
styrene.
Sulphur oxides
Metal oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : No data available

Acute inhalation toxicity : No data available

Acute dermal toxicity : No data available

Skin corrosion/irritation

Product:

No known irritant effect.
May cause irritation of respiratory tract.

Serious eye damage/eye irritation

Product:

Dust contact with the eyes can lead to mechanical irritation.

Respiratory or skin sensitisation

Product:

No known sensitising effect.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : No data available

Genotoxicity in vivo : No data available

Carcinogenicity

Product:

This information is not available.

Reproductive toxicity

Product:

Effects on fertility : No data available

STOT - single exposure

Product:

No data available

STOT - repeated exposure

Product:

No data available

Aspiration toxicity

Product:
No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	No data available
Toxicity to daphnia and other aquatic invertebrates	:	No data available
Toxicity to algae	:	No data available
Toxicity to microorganisms	:	No data available

12.2 Persistence and degradability

Product:

Biodegradability	:	No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation	:	No data available

12.4 Mobility in soil

Product:

Mobility	:	No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Other adverse effects

Product:

Additional ecological information	:	Should not be released into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with the European Directives on waste and hazardous waste.
In accordance with local and national regulations.
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Contaminated packaging : Dispose of in accordance with local regulations.
Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Other regulations:

The product does not need to be labelled in accordance with EC directives or respective na-tional laws.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Cana-da); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equip-ment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentra-tion; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Mari-time Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisa-tion for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Develop-ment; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumu-lative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substanc-es; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evalua-tion, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Sub-stances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioac-cumulative

Further information

Contact Point : AzureFilm d.o.o

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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This safety datasheet only contains information relating to safety and does not replace any product information or product specification.