

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version Revision Date: SDS Number: Date of last issue: 19.12.2018 1.1 05.05.2020 10000018393 Date of first issue: 19.12.2018 REG\_EU\_ RED / EN

## 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 Sub-	:	Thermoplastic high-performance material, High-performance
stance/Mixture		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



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Remarks	: No hazardous ingredients
SECTION 4: First aid meas	sures
4.1 Description of first aid me	asures
General advice	<ul> <li>Move out of dangerous area. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.</li> <li>Give oxygen or artificial respiration if needed.</li> </ul>
If inhaled	: Move to fresh air. If symptoms persist, call a physician.
In case of skin contact	<ul> <li>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.</li> </ul>
In case of eye contact	<ul> <li>Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.</li> <li>Keep eye wide open while rinsing.</li> </ul>
If swallowed	: If symptoms persist, call a physician.
4.2 Most important symptoms	s and effects, both acute and delayed
Symptoms	: No information available.
4.3 Indication of any immedia	ate medical attention and special treatment needed
Treatment	: No information available.
SECTION 5: Firefighting m	easures
5.1 Extinguishing media	
Suitable extinguishing med	dia : Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use water spray, alcohol-resistant foam, dry chemical or car-



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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	1	
Advice on safe handling	:	<ul> <li>Provide for appropriate exhaust ventilation and dust collection at machinery.</li> <li>The material can accumulate static charge and can therefore cause electrical ignition.</li> <li>Minimize dust generation and accumulation.</li> <li>Dust must be collected and disposed of carefully.</li> <li>Wear personal protective equipment.</li> <li>Do not breathe vapours/dust.</li> </ul>
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	:	<ul> <li>Handle in accordance with good industrial hygiene and safety practice.</li> <li>Avoid contact with skin, eyes and clothing.</li> <li>Wash hands before breaks and immediately after handling the product.</li> <li>Regular cleaning of equipment, work area and clothing.</li> <li>Keep away from food and drink.</li> <li>General industrial hygiene practice.</li> <li>When using do not eat, drink or smoke.</li> </ul>
7.2 Conditions for safe storage, i	nc	luding any incompatibilities
Requirements for storage areas and containers	:	Keep containers tightly closed in a dry, cool and well- ventilated place.
Further information on stor- age 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



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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 ef-	Value
			fects	
Carbon black	Workers	Inhalation		2 mg/m3
Remarks:	DNEL (long-term	n 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 dura- bility 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 pro- tective 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 sub- stance 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 ap- proved filter.



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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
рН	:	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



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Visc	cosity, kinematic	: Not applicable	
9.2 Other in Conduc		: 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.
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## 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



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# 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
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Genotoxicity in vivo	:	No data available
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# 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



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## 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	:

## 12.2 Persistence and degradability

# Product:

Biodegradability : No data available

# 12.3 Bioaccumulative potential

#### Product:

Bioaccumulation	:	No data available
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#### 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

No data available

## 12.6 Other adverse effects

# Product:

Additional ecological infor-	:	Should not be released into the environment.
mation		



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# **SECTION 13: Disposal considerations**

13.1 Waste treatment methods	
Product	<ul> <li>Dispose of in accordance with the European Directives on waste and hazardous waste.</li> <li>In accordance with local and national regulations.</li> <li>According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.</li> </ul>
Contaminated packaging	<ul> <li>Dispose of in accordance with local regulations.</li> <li>Dispose of as unused product.</li> </ul>

# **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.



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# **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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