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

1.1. Product identifier
PA11 Carbon Fiber
Product code: 13

Further trade names
UFI (Unique Formula Identifier): M410-H0QX-J002-EA1P

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

Use of the substance/mixture
Powder material for selective laser sintering (SLS) process

Uses advised against
Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Sinterit Sp. z o. o.
Street: Nad Drwina 10 bud. B3
Place: PL-30-741 Krakow
Telephone: +48 570 697 854
e-mail: contact@sinterit.com
Contact person: K. Glowacki
Responsible Department: E-Mail: contact@sinterit.com
Sinterit sp. z o.o., Nad Drwina 10 bud. B3, 30-741 Krakow, Poland

1.4. Emergency telephone number:

Further Information
The substance does not need registration in accordance with REACH (EC) No. 1907/2006.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation
This substance is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

Additional advice on labelling
Labelling according to to GHS (UK CLP) regulation.: none

2.3. Other hazards

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
No risks worthy of mention. Please observe the information on the safety data sheet at all times.

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization
polyamides, additives
Further Information
Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation
In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin
Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes
Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion
4.2. Most important symptoms and effects, both acute and delayed
No 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 media
Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

Unsuitable extinguishing media
High power water jet.

5.2. Special hazards arising from the substance or mixture
Can be released in case of fire: Carbon monoxide Carbon dioxide (CO2). Nitrogen oxides (NOx). HCN.

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid dust formation.
Do not breathe dust.
Remove all sources of ignition.
6.2. Environmental precautions
Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up
Take up mechanically.
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections
Safe handling: see section 7
Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion
Usual measures for fire prevention. Dust clouds may present an explosion hazard.

Further information on handling
Avoid generation of dust.
General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Further information on storage conditions
Keep the packing dry and well sealed to prevent contamination and absorption of humidity.
Recommended storage temperature: 20°C
Protect against: frost. UV-radiation/sunlight. Heat (>60°C). Humidity

7.3. Specific end use(s)
See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Additional advice on limit values
To date, no national critical limit values exist.

8.2. Exposure controls
Appropriate engineering controls
   Technical measures and the application of suitable work processes have priority over personal protection equipment.

   Dust should be exhausted directly at the point of origin.

Protective and hygiene measures
   Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection
   Dust protection goggles.

Hand protection
   In case of prolonged or frequently repeated skin contact:
   Wear suitable gloves.
   Suitable material:
   FKM (fluororubber). - Thickness of glove material: 0,4 mm
   Breakthrough time >= 8 h
   Butyl rubber. - Thickness of glove material: 0,5 mm
   Breakthrough time >= 8 h
   CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm
   Breakthrough time >= 8 h
   NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm
   Breakthrough time >= 8 h
   PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm
   Breakthrough time >= 8 h
   The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.
   Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection
   Suitable protective clothing: Protective clothing.
   Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection
   With correct and proper use, and under normal conditions, breathing protection is not required.
   Respiratory protection necessary at:
   -Exceeding exposure limit values
   -Insufficient ventilation and Generation/formation of dust
   Suitable respiratory protective equipment: particulates filter device (DIN EN 143). Type: P1-3
   The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
   Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo.

Environmental exposure controls
   No special precautionary measures are necessary.
### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Powder, solid</td>
</tr>
<tr>
<td>Colour:</td>
<td>black</td>
</tr>
<tr>
<td>Odour:</td>
<td>odourless</td>
</tr>
<tr>
<td>pH-Value:</td>
<td>not determined</td>
</tr>
<tr>
<td>Changes in the physical state</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>198 - 210 °C</td>
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<tr>
<td>Boiling point or initial boiling point and boiling range:</td>
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<tr>
<td>Sublimation point</td>
<td>not determined</td>
</tr>
<tr>
<td>Softening point</td>
<td>not determined</td>
</tr>
<tr>
<td>Pour point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Sustaining combustion:</td>
<td>Not sustaining combustion</td>
</tr>
<tr>
<td>Explosive properties</td>
<td></td>
</tr>
<tr>
<td>Dust clouds may present an explosion hazard.</td>
<td></td>
</tr>
<tr>
<td>Dust explosion category:</td>
<td>St 2</td>
</tr>
<tr>
<td>KSt-value in bar m s⁻¹:</td>
<td>200 - 300</td>
</tr>
<tr>
<td>Lower explosion limits:</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
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</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>&gt; 450 °C</td>
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<tr>
<td>Self-ignition temperature</td>
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<tr>
<td>Solid:</td>
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<tr>
<td>Decomposition temperature:</td>
<td>&gt; 350 °C</td>
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<tr>
<td>Oxidizing properties</td>
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<td>Vapour pressure:</td>
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<tr>
<td>Density:</td>
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<tr>
<td>Bulk density:</td>
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<td>Water solubility:</td>
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<td>Solubility in other solvents</td>
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<td>Partition coefficient n-octanol/water:</td>
<td>SECTION 12: Ecological information</td>
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<tr>
<td>Viscosity / dynamic:</td>
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<td>Viscosity / kinematic:</td>
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<td>Flow time:</td>
<td>not determined</td>
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<tr>
<td>Relative vapour density:</td>
<td>not determined</td>
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<tr>
<td>Solvent separation test:</td>
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</tr>
<tr>
<td>Solvent content:</td>
<td>not determined</td>
</tr>
</tbody>
</table>
9.2. Other information

Solid content: not determined

Particle size in µm:
D10: 14, 7
D50: 42.6
D90: 78.8

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions. Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. Heat (>60°C).

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses. Can be released in case of fire: Carbon monoxide Carbon dioxide (CO2). Nitrogen oxides (NOx). HCN.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.
PP (polypropylene):
Acute toxicity (oral): >5000 mg/kg (Rat)

Irritation and corrosivity

Based on available data, the classification criteria are not met. No data available.

Sensitising effects

Based on available data, the classification criteria are not met. No data available.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met. No data available.

STOT-single exposure

Based on available data, the classification criteria are not met. No data available.
STOT-repeated exposure
   Based on available data, the classification criteria are not met.
   No data available.

Aspiration hazard
   Based on available data, the classification criteria are not met.
   No data available.

Specific effects in experiment on an animal
   No data available.

SECTION 12: Ecological information

12.1. Toxicity
   No data available.

12.2. Persistence and degradability
   No data available.

12.3. Bioaccumulative potential
   No indication of bioaccumulation potential.

12.4. Mobility in soil
   No data available.

12.5. Results of PBT and vPvB assessment
   This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Other adverse effects
   AOX (mg/l): 0
   Contains the following substances that deplete the ozone layer: none

Further information
   Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

   Disposal recommendations
   Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.
   Non-contaminated packages may be recycled.
   According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.
   Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

   List of Wastes Code - residues/unused products
   200139  MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Plastics

   List of Wastes Code - used product
   200139  MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Plastics

   List of Wastes Code - contaminated packaging
150106  WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging
Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)
14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards
ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user
Refer to section 6-8

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
not relevant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulatory information
2010/75/EU (VOC): No information available.
2004/42/EC (VOC): No information available.
Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)
Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)
The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].
REACH 1907/2006 Appendix XVII: not relevant

National regulatory information

Water hazard class (D): - - non-hazardous to water

15.2. Chemical safety assessment
For this substance a chemical safety assessment is not required.

SECTION 16: Other information

Changes
Rev. 1.0; Initial release 10.09.2021

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstracts Service
CLP: Classification, Labelling and Packaging of substances and mixtures
DNEL: Derived No Effect Level
d: day(s)
EINECS: European INventory of Existing Commercial chemical Substances
ELINCS: European List of Notified Chemical Substances
ECHA: European Chemicals Agency
EWC: European Waste Catalogue
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
h: hour
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NLP: No-Longer Polymers
N/A: not applicable
OECD: Organisation for Economic Co-operation and Development
PNEC: predicted no effect concentration
PBT: Persistent bioaccumulative toxic
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
REACH: Registration, Evaluation, Authorisation of Chemicals
SVHC: substance of very high concern
TRGS: Technische Regeln für Gefahrstoffe
Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
- Health hazards: Calculation method.
- Environmental hazards: Calculation method.
- Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.