

## EC SAFETY DATA SHEET PA12

### 1. Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name - PA12

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

**Relevant identified uses of the substance or mixture**

Laser sintering

Coatings

Composites

**Uses advised against**

No data available.

#### 1.3 Details of the supplier of the safety data sheet

Address

Sinterit sp. z o.o.

ul. Szlak 26

31-153 Kraków

POLAND

Telephone no. +48-730-293-207

contact@sinterit.com

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification information**

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

### 2.2 Label elements

Not relevant

### 2.3 Other hazards

No data available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable. The product is not a substance.

### 3.2 Mixtures

**Chemical characterization**

Polyamide 12, contains additives

**Hazardous ingredients**

This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH), annex II.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes and launder thoroughly before reusing.

#### After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

#### After skin contact

Wash off immediately with soap and water.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

#### After ingestion

Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Call a doctor.

### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water spray jet

#### Unsuitable extinguishing media

High power water jet

### 5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon monoxide (CO); Carbon dioxide (CO<sub>2</sub>); Ammonia (NH<sub>3</sub>); Hydrogen cyanide (HCN); Toxic gases/vapours

### 5.3 Advice for firefighters

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Wear protective clothing.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Keep away sources of ignition.

#### For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically. Send in suitable containers for recovery or disposal.

### 6.4 Reference to other sections

No data available.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary). Avoid contact with skin and eyes.

Handle with care - avoid bumps, friction and impact.

#### General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Avoid contact with eyes and skin. Remove soiled or soaked clothing immediately. Do not inhale dust. Wash hands before breaks and after work. Provide eye wash fountain in work area.

#### Advice on protection against fire and explosion

Keep away from sources of heat and ignition. Avoid formation of dust. Take precautionary measures against static charges.

#### Dust explosion class

St2

### 7.2 Conditions for safe storage, including any incompatibilities

#### Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

#### Recommended storage temperature

Value < 60 °C

#### Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

### 7.3 Specific end use(s)

No data available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	DUST		
	List of approved workplace exposure limits (WELs) / EH40		
	total inhalable dust		
	TWA	10	mg/m <sup>3</sup>
	List of approved workplace exposure limits (WELs) / EH40		
	respirable dust		
	TWA	4	mg/m <sup>3</sup>

## 8.2 Exposure controls

### Appropriate engineering controls

No data available.

### Personal protective equipment

#### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified. Particle filter P2

#### Eye / face protection

Safety glasses (EN 166)

#### Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves. Appropriate Material nitrile rubber.

#### Other

Normal chemical work clothing. Antistatic shoes

### Environmental exposure controls

No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form/Colour</b>	
Powder	
white	
<b>Odour</b>	
No data available	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
Value	> 4
Remarks	Suspension in water
<b>Boiling point / boiling range</b>	
Remarks	Decomposes below boiling point.
<b>Melting point / melting range</b>	
Value	160 - 200 °C

<b>Decomposition point / decomposition range</b>	
Value	370 °C
<b>Flash point</b>	
No data available	
<b>Auto-ignition temperature</b>	
Value	> 400 °C
<b>Oxidising properties</b>	
No data available	
<b>Explosive properties</b>	
No data available	
<b>Flammability (solid, gas)</b>	
No data available	
<b>Lower flammability or explosive limits</b>	
Value	30-60 g/m <sup>3</sup>
Reference substance	Dust-air mixture
<b>Upper flammability or explosive limits</b>	
No data available	
<b>Vapour pressure</b>	
No data available	
<b>Vapour density</b>	
No data available	
<b>Evaporation rate</b>	
No data available	
<b>Relative density</b>	
No data available	
<b>Density</b>	
Value	1.020 - 1.150 kg/m <sup>3</sup>
Reference temperature	20 °C
<b>Bulk density</b>	
Value	200 - 500 kg/m <sup>3</sup>
Reference temperature	20 °C
<b>Solubility in water</b>	
Remarks	insoluble
<b>Solubility(ies)</b>	
No data available	
<b>Partition coefficient: n-octanol/water</b>	
No data available	
<b>Viscosity</b>	
No data available	

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

### 10.3 Possibility of hazardous reactions

danger of dust explosion

#### 10.4 Conditions to avoid

Temperatures > 60°C; Protect from humid air and water. Heat, naked flames and other ignition sources.

#### 10.5 Incompatible materials

No data available.

#### 10.6 Hazardous decomposition products

Ammonia (NH<sub>3</sub>); Toxic gases/vapours; Hydrogen cyanide (HCN)  
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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

<b>Acute oral toxicity</b>
No data available
<b>Acute dermal toxicity</b>
No data available
<b>Acute inhalational toxicity</b>
No data available
<b>Skin corrosion/irritation</b>
No data available
<b>Serious eye damage/irritation</b>
No data available
<b>Respiratory or skin sensitisation</b>
No data available
<b>Germ cell mutagenicity</b>
No data available
<b>Reproduction toxicity</b>
No data available
<b>Carcinogenicity</b>
No data available
<b>STOT-single exposure</b>
No data available
<b>STOT-repeated exposure</b>
No data available
<b>Aspiration hazard</b>
No data available
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>
Skin contact may cause mechanical irritation through dust particles. Eye contact may cause mechanical irritation through dust particles.
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>
Repeated and prolonged exposure to high dust concentrations may lead to irritation of the respiratory tract.

## SECTION 12: Ecological information

### 12.1 Toxicity

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
No data available

### 12.2 Persistence and degradability

PA 12 in no degradable.

### 12.3 Bioaccumulative potential

No data available.

### 12.4 Mobility in soil

No data available.

### 12.5 Results of PBT and vPvB assessment

No data available.

### 12.6 Other adverse effects

No data available.

### 12.7 Other information

Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

#### Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified

by the regional disposer.

## **SECTION 14: Transport information**

### **14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations.

### **14.2 Transport IMDG**

The product is not subject to IMDG regulations.

### **14.3 Transport ICAO-TI / IATA**

The product is not subject to ICAO-TI / IATA regulations.

### **14.4 Other information**

No data available.

### **14.5 Environmental hazards**

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

### **14.6 Special precautions for user**

No data available.

### **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 regulations**

<b>Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)</b>
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According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.
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<b>REACH candidate list of substances of very high concern (SVHC) for authorisation</b>
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According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.
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<b>Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES</b>
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According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.
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<b>Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances</b>
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This product is not subject to Part 1 or 2 of Annex I.
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### **15.2 Chemical safety assessment**

For this mixture a chemical safety assessment has not been carried out.



## **SECTION 16: Other information**

### **Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.