

Safety Data Sheet

Product name: Sintratec PA12 black

Version 1

Region: GB

Issue Date 01.06.16

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

1.1 Product identifier

Trade name Sintratec PA12 black

Product name Sintratec PA12 black

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

Relevant identified uses of the substance or mixture

Laser sintering

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Address:

Company name Sintratec AG
Street Badenerstrasse 13
Postal Code 5200
City Brugg
Country Switzerland

Phone number +41 56 552 00 22

Mail info@sintratec.com

1.4 Emergency telephone number

+41 56 552 00 22 (Mo – Fr 9am -12pm & 13pm – 17pm) (CET)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification information

Classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP) and Dangerous Substances Directive 67/548/EC (DSD) are not met by the product.

2.2 Label elements

Not relevant

Labelling information

A hazard-warning label in accordance with EC Directives is not needed.

2.3 Other hazards

No information available.

SECTION 3: Composition and information on ingredients

3.1 Substances

Chemical characterization

Polylaurolactam (polyamide 12) (Cas-No. 25038-74-8), modified, polymer

3.2 Mixtures

The product is not a mixture.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of continuing adverse effects, see a physician. Change contaminated clothing immediately.

After inhalation

IF INHALED: The affected person has to be removed to an area with fresh air and placed in a comfortable position for breathing.

After skin contact

If product gets in contact with skin it is recommended to wash off with water and soap. When in contact with molten product, cool quickly with fresh water. It is recommended to not pull solidified product from the skin and seek medical attention. Seek for medical attention.

After eye contact

Clean right after with enough water, also under eyelids, for a minimum of 15 minutes.

After ingestion

Rinse mouth carefully with water. Get medical advice immediately. An unconscious person should never be given anything by mouth.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam; Water spray jet; Carbon dioxide; extinguishing powder

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be set free: Carbon dioxide (CO₂); Carbon monoxide (CO); Nitrogen oxides (NO_x); Combustion materials of this product have to be classified invariably as respiratory poison.

5.3 Advise for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure the existence of adequate ventilation. Avoid contact with skin, eyes or clothing and the formation of dust. Sources of ignition should be kept away. Refer to protective measures listed in sections 7 and 8.

For emergency responders

Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Releasing into groundwater/surface waters/drains is not permitted.

6.3 Methods and material for containment and cleaning up

Treat the material as prescribed under the heading "Disposal considerations" when picked up. Take up mechanically.

6.4 Reference to other sections

No data available

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

There are no measures necessary if stored and handled as instructed. Avoid dust formations and depositions. Good ventilation is needed (local exhaust ventilation, if necessary)

General protective and hygiene measures

Washing hands before breaks and after work is recommended. Foodstuff and beverages should be kept away. Eating, drinking or smoking is not allowed during work time. Provide eye wash fountain in work area. No dust inhalation. Areas of the skin touched by dust are to be washed with soap and water immediately, as the powder takes the natural moisture from the skin.

Advice on protection against fire and explosion

Sources of heat and ignition should be kept away. Together with air dust can create an explosive mixture. To avoid static charges any possible precautionary measures should be taken.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

The containers should be stored dry, tightly closed, at temperatures around 5 and 35°C and relative air moisture of 20 – 70%.

Requirements for storage rooms and vessels

The product has to be stored in closed containers.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Dust	
List of approved workplace exposure limits (WELs) / EH4	
Total inhalable dust	
TWA	10 mg/ m ³
List of approved workplace exposure limits (WELs) / EH40	
Respirable dust	
TWA	4 mg/ m ³

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If dust formations do happen, take appropriate measures for a breathing protection in the event workplace threshold values are not clarified. As soon as workplace exposure limits are exceeded, a respiration protection necessary for this job must be worn. Respirator with particulate filter (filter cat. P 3)

Eye / face protection

Safety glasses (EN 166)

Hand protection

During intensive contact, use protective gloves (EN 374). Before wearing, the protective gloves should be tested for its specific work-station suitability (i.e. mechanical resistance, product compatibility, and antistatic properties). Design operations to avoid constant usage use of the gloves. Read the manufacturer's instructions and information of the use, storage, care and replacement of protective gloves. After being damaged or worn, the gloves have to be replaced. At room temperature no protective gloves are needed. Thermally insulating protective gloves are worn when thermal processing.

Other

Always fully closed clothing.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Powder
Color	Dark Grey
Odor	Odorless
Odor Threshold	Not determined
pH	Not applicable
Melting point/freezing point	185 °C
Method	EN ISO 11357-1
Boiling point / boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not determined
Flammability (solid, gas)	Not flammable
Lower flammability or explosive limits	Not determined
Upper flammability or explosive limits	Not determined
Vapor Pressure	Not applicable
Vapor density	Not determined
Density	1.0 – 1.1 g/cm ³
Reference temperature	20°C
Relative density	Not determined
Water solubility	Insoluble
Partition coefficient: n-octanol/water	Not determined
Ignition temperature	>350 °C
Method	DIN 51794
Auto-Ignition temperature	No data available
Decomposition temperature	>300 °C
Viscosity	Not determined
Explosive properties	Product is explosive
Oxidizing properties	No oxidizing properties

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

None, when handled according to its intended use.

10.5 Incompatible materials

None, if handled according to order

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Information on Toxicology

11.1 Information on toxicological effects

Acute oral toxicity

No data available.

Acute dermal toxicity

No data available.

Acute inhalation toxicity

No data available.

Skin corrosion/irritation

Not classified

Serious eye damage/eye irritation

Eye contact may cause mechanical irritation through dust particles

Reproductive toxicity

Not classified

Germ cell mutagenicity

Not classified

Reproductive toxicity

Not classified

Carcinogenicity

Not classified

STOT – single exposure

Not classified

STOT – repeated exposure

Not classified

Aspiration hazard

Not classified

Symptoms related to the physical, chemical and toxicological characteristics

Eye Contact In case of eye contact, it is possible to cause mechanical irritation through dust particles.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Dust inhalation can irritate the respiratory tract.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)	No data available
Toxicity to fish (chronic)	No data available
Toxicity to Daphnia (acute)	No data available
Toxicity to Daphnia (chronic)	No data available
Toxicity to algae (acute)	No data available
Toxicity to algae (chronic)	No data available
Bacteria toxicity	No data available

12.2 Persistence and degradability

If used as intended, this product causes no problems, on the strength of previous experience.

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

No unmonitored discharge into environment.

SECTION 13: Disposal considerations

13 Waste treatment methods

Product

The disposal of the product should be accordingly with applicable regional, national, local laws and regulations and be according to the European Waste Catalogue.

Packaging

All the residuals have to be removed from packaging and when emptied totally disposed of in accordance with the regulations for waste removal. If not completely emptied, packages have to be disposed of as requested 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 73/78 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:

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorization)

In accordance with the Reach regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorization.

REACH candidate list of substances of very high concern (SVHC) for authorization

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorization ("Authorization list").

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

The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1997/2006.

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

16.1 Revision Note

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