

Safety Data Sheet

Adsint PA11 black CF

Revision date : 2018/11/05
Version: 1.0

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(932056/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Adsint PA11 black CF

Recommended use of the chemical and restriction on use

Recommended use*: 3D Printing

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF 3D Printing Solutions GmbH
69115 Heidelberg
GERMANY

Contact address:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932
USA
Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

Hazards not otherwise classified

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Dust can form an explosive mixture with air. The product may cause burns, if handled in the melted state.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Under the referenced regulation, this product does not contain any components classified for health hazards above the relevant cut off value.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing. If symptoms persist, seek medical advice.

If inhaled:

Keep patient calm, remove to fresh air.

If on skin:

Wash thoroughly with soap and water. Areas affected by molten material should be quickly placed under cold running water. Solidified product should not be pulled from the skin.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Hazards: No hazards anticipated.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, dry powder, carbon dioxide, foam

Unsuitable extinguishing media for safety reasons:

water jet

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Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon oxides, ammonia oxides, toxic gases/vapours

The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Put on breathing apparatus.

Further information:

In case of fire and/or explosion do not breathe fumes. Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product. Dust can form an explosive mixture with air.

Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Keep away from sources of ignition. Avoid contact with the skin, eyes and clothing. Information regarding personal protective measures see, section 8. Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

Environmental precautions

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

Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container (adequately labelled) for disposal. Avoid raising dust.

7. Handling and Storage

Precautions for 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.

Protection against fire and explosion:

Where required Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Avoid dust formation. Avoid all sources of ignition: heat, sparks, open flame.

Dust explosion class: Dust explosion class 2 (Kst-value 200 up to 300 bar m s⁻¹).

Conditions for safe storage, including any incompatibilities

Segregate from strong oxidizing agents. Segregate from strong acids.

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Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.
Protect from temperatures above: 60 °C

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

carbon	OSHA PEL	PEL 15 mg/m3 Total dust ; PEL 5 mg/m3 Respirable fraction ; TWA value 5 mg/m3 Respirable fraction ; TWA value 10 mg/m3 Total dust ; TWA value 2.5 mg/m3 Respirable dust ; TWA value 15 millions of particles per cubic foot of air ;
	ACGIH TLV	TWA value 2 mg/m3 Respirable fraction ; TWA value 3 mg/m3 Respirable particles ; TWA value 10 mg/m3 Inhalable particles ;

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties)., Follow manufacturer's advice on use, storage, maintenance and replacement of gloves., Protective gloves are recommended in case of extensive contact or in case of particular sensitivity against skin contact.

Eye protection:

In order to satisfy general industrial hygiene rules safety glasses with side-shields (e.g. EN 166) are recommended.

Body protection:

No body protection required if used for intended purpose and satisfying generally accepted industrial hygiene rules.

Antistatic safety shoes

General safety and hygiene measures:

Wear protective clothing to prevent contact during mechanical processing and/or hot melt conditions. Avoid inhalation of dust. Ventilation should be sufficient to maintain inhalation exposures below OSHA PEL for particulates. Avoid contact with skin and eyes. Keep away from food, drink and animal feeding stuffs. When using do not eat or drink. When using do not smoke. Take off immediately all contaminated clothing. Avoid inhalation of dusts. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Form:	powder
Odour:	odourless
Odour threshold:	not applicable, odour not perceivable
Colour:	black
pH value:	insoluble

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melting range:	approx. 198 - 210 °C
decomposition point:	> 350 °C
Flash point:	not applicable, the product is a solid
Flammability:	Not a flammable solid according to UN transport regulations division 4.1 and GHS chapter 2.7.
Lower explosion limit:	For solids not relevant for classification and labelling.
Upper explosion limit:	For solids not relevant for classification and labelling.
Autoignition:	approx. > 450 °C
SADT:	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Vapour pressure:	not applicable
Relative density:	No applicable information available.
Bulk density:	approx. 530 kg/m ³
Vapour density:	The product is a non-volatile solid.
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Self-ignition temperature:	not self-igniting
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	not applicable, the product is a solid
Viscosity, kinematic:	not applicable, the product is a solid
Solubility in water:	(20 °C) insoluble
Evaporation rate:	The product is a non-volatile solid.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

Oxidizing properties:

not fire-propagating

Dust explosion class:

Dust explosion class 2 (Kst-value 200 up to 300 bar m s⁻¹) (St 2)

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Dust explosion hazard.

Conditions to avoid

Temperature: 60 degrees Celsius

Avoid all sources of ignition: heat, sparks, open flame. Avoid humidity. Avoid direct contact with water.

Incompatible materials

strong acids, oxidizing agents

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Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: toxic gases/vapours, hydrogen cyanide

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Contact with molten product may cause thermal burns. The resin in pelleted form poses a low hazard.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes. Thermal decomposition products of the substance can irritate the eyes, skin, and respiratory tract.

Sensitization

Assessment of sensitization: No reliable data were available concerning sensitization. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation. Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs. Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect.

Carcinogenicity

Assessment of carcinogenicity: No data was available concerning carcinogenic activity.

Reproductive toxicity

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Assessment of reproduction toxicity: No reliable data are available concerning reproduction toxicity.

Teratogenicity

Assessment of teratogenicity: No reliable data was available concerning teratogenicity.

Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

The product has not been tested. The statement has been derived from the properties of the individual components. Dust may cause mechanical irritation.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Bioaccumulative potential

Assessment bioaccumulation potential

Does not significantly accumulate in organisms.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Bioaccumulation potential

The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Assessment transport between environmental compartments

Study scientifically not justified.

Additional information

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

13. Disposal considerations

Waste disposal of substance:

Observe national and local legal requirements.

Container disposal:

Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

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14. Transport Information

Land transport
USDOT

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
NJ	7440-44-0	carbon
PA	7440-44-0	carbon

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 0 Special:

Assessment of the hazard classes according to UN GHS criteria (most recent version):

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2018/11/05

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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