

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 1/10

(30045145/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Recommended use of the chemical and restriction on use

Recommended use*: Polymer; for industrial processing only

Suitable for use in industrial sector: Polymers industry

* 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 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

Molecular formula: (C₁₂H₂₂N₂O₂)_n
Synonyms: polyamide (PA 66)

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.

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 2/10

(30045145/SDS_GEN_US/EN)

Hazards not otherwise classified

Labeling of special preparations (GHS):

May emit phosphine during storage and processing. Phosphine can cause serious lung damage.

3. Composition / Information on Ingredients

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

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
65997-17-3	>= 25.0 - < 50.0%	Glass, oxide, chemicals
7723-14-0	>= 5.0 - < 7.0%	red phosphorus
1333-86-4	>= 1.0 - < 3.0%	carbon black
1314-13-2	>= 0.3 - < 1.0%	Zinc oxide

4. First-Aid Measures

Description of first aid measures

General advice:

Avoid contact with the skin, eyes and clothing. Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention. Burns caused by molten material require hospital treatment.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water. Ingestion is not likely in the available physical form. If ingested, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

Hazards: No hazard is expected under intended use and appropriate handling.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat symptomatically.

5. Fire-Fighting Measures

Extinguishing media

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 3/10

(30045145/SDS_GEN_US/EN)

Suitable extinguishing media:
water spray, foam, dry powder

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

Ammonium hydroxide, carbon monoxide, carbon dioxide, cyclopentanone, hydrogen cyanide, Phosphine, amine derivatives, nitriles can be emitted at > 310 °C

Under special fire conditions traces of other toxic substances are possible. Formation of further decomposition and oxidation products depends upon the fire conditions.

Advice for fire-fighters

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

Personal precautions, protective equipment and emergency procedures

No special precautions necessary.

Environmental precautions

This product is not regulated by CERCLA ('Superfund'). This product is not regulated by RCRA.

No special precautions necessary.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of.

7. Handling and Storage

Precautions for safe handling

Provide suitable exhaust ventilation at the drying process and in the area surrounding the melt outlet of processing machines. Closed containers should only be opened in well-ventilated areas. Ensure thorough ventilation of stores and work areas.

Any short stoppages in production, it is recommended that you inject material into the mould not purge an air shot. Any molten material drooling from the machine nozzle or hot runner nozzles can self-ignite when in open atmosphere.

It is therefore advisable to dispose of purgings etc into water containers.

For additional guidelines and recommendations see the product-specific "Processing Data Sheet".

Protection against fire and explosion:

Take precautionary measures against static discharges.

Handling of hot melt may produce small flame-up conditions. Hot melt should be placed in cool water immediately if flame-up occurs.

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 4/10

(30045145/SDS_GEN_US/EN)

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Aluminium, Carbon steel (Iron)

Further information on storage conditions: Keep container tightly closed. Avoid deposition of dust. Protect against moisture.

Storage stability:

Protect against moisture.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

carbon black	OSHA PEL	PEL 3.5 mg/m ³ ; TWA value 3.5 mg/m ³ ;
	ACGIH TLV	TWA value 3 mg/m ³ Inhalable fraction ;
Glass, oxide, chemicals	ACGIH TLV	TWA value 5 mg/m ³ Inhalable fraction ; TWA value 1 fibers/cm ³ Fiber ;
		Respirable fibers: length > 5 micrometers; aspect ratio >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination. TWA value 0.2 fibers/cm ³ Fiber ;
		Respirable fibers: length > 5 micrometers; aspect ratio >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination.

Advice on system design:

Ensure adequate ventilation. Provide local exhaust ventilation to control dusts/vapours.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. Wear the following respiratory protection if exposure limit for phosphine may be exceeded: Wear a NIOSH-certified (or equivalent) supplied-air respirator.

Hand protection:

Wear gloves to prevent contact during mechanical processing and/or hot melt conditions.

Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Do not inhale gases/vapours/aerosols. After use of gloves apply skin-cleaning agents and skin cosmetics. Wash soiled clothing immediately.

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 5/10

(30045145/SDS_GEN_US/EN)

9. Physical and Chemical Properties

Form:	pellets	
Odour:	garlic-like	
Odour threshold:	No applicable information available.	
Colour:	black	
pH value:	not applicable	
melting range:	260 °C	(DIN 53765)
Boiling range:	The substance / product decomposes therefore not determined.	
Sublimation point:	No applicable information available.	
Flash point:	> 400 °C	(Unspecified)
Flammability:	not self-igniting	
Flammability of Aerosol Products:	not applicable, the product does not form flammable aerosoles	
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Autoignition:	> 350 °C	(ASTM D1929)
Vapour pressure:	not applicable	
Density:	1.30 - 1.60 g/cm3 (20 °C)	(EN ISO 1183-1)
Relative density:	Study does not need to be conducted.	
Bulk density:	500 - 800 kg/m3	
Vapour density:	not applicable	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	> 310 °C (TGA) To avoid thermal decomposition, do not overheat.	
Viscosity, dynamic:	not applicable, the product is a solid	
Viscosity, kinematic:	not applicable, the product is a solid	
Solubility in water:	insoluble	
Solubility (quantitative):	No applicable information available.	
Solubility (qualitative):	No applicable information available.	
Evaporation rate:	The product is a non-volatile solid.	

10. Stability and Reactivity

Reactivity

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

Oxidizing properties:
not fire-propagating

Chemical stability

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

Possibility of hazardous reactions

The product is chemically stable.
No hazardous reactions known.

Conditions to avoid

Temperature: > 310 degrees Celsius

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 6/10

(30045145/SDS_GEN_US/EN)

Incompatible materials

No substances known that should be avoided.

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: Ammonium hydroxide, carbon monoxide, carbon dioxide, cyclopentanone, hydrogen cyanide, Phosphine, amines, nitriles

Thermal decomposition:

> 310 °C (TGA)

To avoid thermal decomposition, do not overheat.

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.

Information on: red phosphorus

Assessment of acute toxicity: Inhalation may cause systemic effects.

Oral

Type of value: ATE

Value: > 5,000 mg/kg

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

Inhalation

Not inhalable due to the physico-chemical properties of the product.

Dermal

No applicable information available.

Assessment other acute effects

No applicable information available.

Irritation / corrosion

Assessment of irritating effects: Thermal decomposition products of the substance can irritate the eyes, skin, and respiratory tract.

Skin

No data available.

Eye

No data available.

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 7/10

(30045145/SDS_GEN_US/EN)

Sensitization

Assessment of sensitization: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No applicable information available.

Information on: red phosphorus

Assessment of repeated dose toxicity: May affect the liver and kidneys as indicated in animal studies.

After repeated exposure the prominent effect is local irritation.

Genetic toxicity

Assessment of mutagenicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Carcinogenicity

Assessment of carcinogenicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Information on: carbon black

Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term animal studies in which the substance was given by inhalation in high concentrations, a carcinogenic effect was observed. A clear indication of an increased risk of cancer in humans has so far not been shown. No carcinogenic potential can be deduced from other studies with rats and mice.

Reproductive toxicity

Assessment of reproduction toxicity: No applicable information available.

Other Information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Symptoms of Exposure

No significant reaction of the human body to the product known.

12. Ecological Information

Toxicity

Aquatic toxicity

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Version: 5.0

Page: 8/10

(30045145/SDS_GEN_US/EN)

Assessment of aquatic toxicity:

The product has not been tested. The statement has been derived from the structure of the product. There is a high probability that the product is not acutely harmful to aquatic organisms.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Experience shows this product to be inert and non-degradable.

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Bioaccumulative potential

Bioaccumulation potential

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

13. Disposal considerations

Waste disposal of substance:

Check for possible recycling. Dispose of in accordance with national, state and local regulations.

Container disposal:

Packs must be completely emptied. Completely emptied packagings can be given for recycling.

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.

EPCRA 313:

CAS Number

Chemical name

Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Page: 9/10

Version: 5.0

(30045145/SDS_GEN_US/EN)

7723-14-0 red phosphorus

CERCLA RQ

1 LBS

CAS Number

7723-14-0

Chemical name

red phosphorus

State regulations

State RTK

NJ

CAS Number

1333-86-4

Chemical name

carbon black

7723-14-0

red phosphorus

65997-17-3

Glass, oxide, chemicals

PA

1333-86-4

carbon black

7723-14-0

red phosphorus

65997-17-3

Glass, oxide, chemicals

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including GLASS WOOL FIBERS (INHALABLE AND BIOPERSISTENT), which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

[Other Prop 65 components may be present in the product.]

NFPA Hazard codes:

Health: 3

Fire: 1

Reactivity: 0

Special:

HMIS III rating

Health: 3

Flammability: 1

Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2018/01/01

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Safety Data Sheet

ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

Revision date : 2018/01/01

Page: 10/10

Version: 5.0

(30045145/SDS_GEN_US/EN)

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