

Safety Data Sheet

ULTRAMID® A3X2G5 UNCOLORED POLYAMIDE

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(30045156/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

ULTRAMID® A3X2G5 UNCOLORED 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: (C12 H22 N2 O2)

Synonyms: Nylon 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.

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Hazards not otherwise classified

Labeling of special preparations (GHS):

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

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Emergency overview

CAUTION:

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

INGESTION MAY CAUSE GASTRIC DISTURBANCES.

May emit phosphine during storage and processing.

Phosphine can cause serious lung damage.

Use with local exhaust ventilation.

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Wear NIOSH-certified chemical goggles.

Wear protective clothing.

Eye wash fountains and safety showers must be easily accessible.

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
1314-13-2	>= 0.3 - < 1.0%	Zinc oxide

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
32131-17-2	>= 50.0 - <= 70.0%	polyamide (PA 66)
65997-17-3	>= 20.0 - <= 40.0%	Glass, oxide, chemicals
7723-14-0	>= 5.0 - <= 10.0%	red phosphorus
26355-78-2	>= 3.0 - <= 7.0%	2-Propenoic acid, polymer with butyl 2-propenoate and ethene

4. First-Aid Measures

Description of first aid measures

General advice:

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

If inhaled:

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.

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.

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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

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.

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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.

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

Glass, oxide, chemicals

ACGIH TLV

TWA value 5 mg/m³ Inhalable fraction ; TWA value 1 fibers/cm³ 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.

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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.

9. Physical and Chemical Properties

Form:	pellets	
Odour:	garlic-like	
Odour threshold:	No applicable information available.	
Colour:	various, depending on the colourant	
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 aerosols	
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:	No data available.	
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, 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.

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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

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.

Information on: Phosphine

Assessment of acute toxicity: Very toxic by inhalation. EU-classification

Oral

No applicable information available.

Inhalation

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

Dermal

No applicable information available.

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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.

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.

Information on: Phosphine

Assessment of repeated dose toxicity: The substance may cause damage to the lung after repeated inhalation. Repeated exposures may result in pulmonary congestion. The substance may cause damage to the kidney after repeated inhalation.

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.

Other Information

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

Symptoms of Exposure

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

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12. Ecological Information

Toxicity

Aquatic toxicity

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:

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Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Not hazardous;

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
1 LBS	7723-14-0	red phosphorus

State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
NJ	7723-14-0	red phosphorus
	65997-17-3	Glass, oxide, chemicals
PA	7723-14-0	red phosphorus
	65997-17-3	Glass, oxide, chemicals

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: 2015/12/08

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