Safety data sheet
ULTRAMID® A3X2G7 UNCOLORED POLYAMIDE

1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

Molecular formula: (C12 H22 N2 O2)
Synonyms: Nylon 66

2. Composition/information on ingredients

CAS Number	Content (W/W)	Chemical name
32131-17-2	30.0 - 60.0 %	polyamide (PA 66)
7723-14-0	<= 5.0 %	phosphorus
65997-17-3	>= 30.0 - <= 60.0 %	Glass, oxide, chemicals

3. Hazard identification

Emergency overview

CAUTION: MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
INGESTION MAY CAUSE GASTRIC DISTURBANCES.
CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE.
CAN CAUSE CARDIAC OR CARDIOVASCULAR DAMAGE.
CAN CAUSE KIDNEY DAMAGE.
CAN CAUSE LIVER DAMAGE.
CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
Avoid contact with the skin, eyes and clothing.
Avoid inhalation of dusts/mists/vapours.
Wear a NIOSH-certified (or equivalent) particulate respirator.
Wear NIOSH-certified chemical goggles.
Wear chemical resistant protective gloves.
Eye wash fountains and safety showers must be easily accessible.

Potential health effects

Primary routes of exposure
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:
Contact with molten product may cause thermal burns.

Information on: Phosphine

Thermal decomposition of red phosphorous may emit phosphine. The PEL/TLV for phosphine is 0.3 ppm ACGIH, OSHA (Final); 1 ppm STEL ACGIH, OSHA (Final).
Inhalation of phosphine may result in severe pulmonary irritation, cough, headache, chest tightness, dizziness, lethargy and stupor. Delayed pulmonary edema may result. Inhalation also results in CNS effects including nausea, dizziness, fatigue, ataxia, seizures and possibly coma. Cardiac arrhythmias may also be noted. Gastric disturbances including nausea, vomiting, abdominal pain and diarrhea may also be noted. Liver and kidney damage may also be noted. Exposure to 8 ppm concentrations at 1 or 2 hrs/day were found to be fatal to humans.

Information on: Phosphorous, red

Inhalation of vapors or smoke from products containing red phosphorus may result in respiratory tract irritation, lung injury or systemic effects. In animal studies, red phosphorus was reported to cause adverse lung and kidney effects.

Irritation:
Contact with the eyes or skin may cause mechanical irritation.

Repeated dose toxicity:

Information on: Fiberglass

This product contains glass fibers which are compounded into the polymer matrix and thus are not expected to present the same hazards as fiberglass wool.

Information on: Fiberglass

Animal implantation studies have indicated that fiberglass wool is an animal carcinogen. A small study of Canadian glass wool workers reported a statistically significant increase in deaths due to lung cancer; however, animal inhalation studies and several large-scale studies of U.S. and European fiberglass wool workers have shown no statistically significant increases in lung cancer. The International Agency for Research on Cancer (IARC) has classified this material in Category 2B.

Information on: Fiberglass

These findings are based on glass wool, which has a smaller diameter than continous glass filament or glass fiber chopped strands or rovings. Fiberglass wool is not used in this product.

4. First-aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required if there are visible signs of phosphine exposure.

If on skin:
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:
Ingestion is not likely in the available physical form. If ingested, seek medical attention.

5. Fire-fighting measures

Flash point:	> 400 °C	(Unspecified)
Autoignition:	> 350 °C	(ASTM D1929)

Suitable extinguishing media:
water, foam, dry extinguishing media

Hazards during fire-fighting:
carbon monoxide, hydrogen cyanide, Phosphine, 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.

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

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

Cleanup:

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

Further information:
High risk of slipping due to leakage/spillage of product.

7. Handling and storage

Handling

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

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.

Storage

General advice:
Keep container tightly closed. Protect against moisture.

8. Exposure controls and personal protection

Components with workplace control parameters

phosphorus	OSHA	PEL 0.1 mg/m3 ;
Glass, oxide, chemicals	ACGIH	TWA value 5 mg/m3 Inhalable fraction ; TWA value 1 fibers/cm³ Fiber ; TWA value 1 fibers/cm³ Fiber ; TWA value 0.2 fibers/cm³ Fiber ;

Advice on system design:
Ensure adequate ventilation. Local exhaust ventilation preferred.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) 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:
Chemical resistant protective gloves

Eye protection:
Tightly fitting safety goggles (chemical goggles).

Body protection:
Apron

General safety and hygiene measures:
Do not inhale gases/vapours/aerosols. Wash soiled clothing immediately.

9. Physical and chemical properties

Form:	granules	
Odour:	odourless	
Colour:	various, depending on the colourant	
pH value:		No data available.
melting range:	260 °C	(DIN 53736)
Density:	1.30 - 1.60 g/cm3	(20 °C) (EN ISO 1183-1)
Bulk density:	500 - 800 kg/m3	
Solubility in water:		insoluble

10. Stability and reactivity

Decomposition products:
Hazardous decomposition products: carbon monoxide, hydrogen cyanide, Phosphine

Thermal decomposition:
> 310 °C
To avoid thermal decomposition, do not overheat.

11. Toxicological information

Chronic toxicity

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.

12. Ecological information

Environmental fate and transport

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

Bioaccumulation:

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:
TSCA, US released / listed

SARA hazard categories (EPCRA 311/312): Not hazardous

SARA 313:

CAS Number	Chemical name
7723-14-0	phosphorus

State regulations

State RTK

CAS Number	Chemical name	State RTK
7723-14-0	phosphorus	MA, NJ, PA
65997-17-3	Glass, oxide, chemicals	MA, NJ, PA

CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other information

HMIS III rating
Health: 3 Flammability: 1 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Local contact information
Tech Desk
1-800-527-8324

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