Safety Data Sheet
ULTRAMID® A3X2G5 BLACK 23187 POLYAMIDE

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


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

Labeling of special preparations (GHS):
May emit phosphine during storage and processing. Phosphine can cause serious lung damage.

3. Composition / Information on Ingredients


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>65997-17-3</td>
<td>&gt;= 25.0 - &lt; 50.0%</td>
<td>Glass, oxide, chemicals</td>
</tr>
<tr>
<td>7723-14-0</td>
<td>&gt;= 5.0 - &lt; 7.0%</td>
<td>red phosphorus</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>&gt;= 1.0 - &lt; 3.0%</td>
<td>carbon black</td>
</tr>
<tr>
<td>1314-13-2</td>
<td>&gt;= 0.3 - &lt; 1.0%</td>
<td>Zinc oxide</td>
</tr>
</tbody>
</table>

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
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.

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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

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td>PEL 3.5 mg/m³ ; TWA value 3.5 mg/m³ ; TWA value 3 mg/m³ Inhalable fraction ;</td>
<td></td>
</tr>
<tr>
<td>Glass, oxide, chemicals</td>
<td>ACGIH TLV</td>
<td>TWA value 5 mg/m³ Inhalable fraction ; TWA value 1 fibers/cm³ Fiber ; Respirable fibers: length &gt; 5 micrometers; aspect ratio &gt;= 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/cm³ Fiber ; Respirable fibers: length &gt; 5 micrometers; aspect ratio &gt;= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination.</td>
</tr>
</tbody>
</table>

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.
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 (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
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.
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
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
7723-14-0  red phosphorus

<table>
<thead>
<tr>
<th>CERCLA RQ</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 LBS</td>
<td>7723-14-0</td>
<td>red phosphorus</td>
</tr>
</tbody>
</table>

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ</td>
<td>1333-86-4</td>
<td>carbon black</td>
</tr>
<tr>
<td></td>
<td>7723-14-0</td>
<td>red phosphorus</td>
</tr>
<tr>
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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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