

# Safety data sheet

According to regulation (EC) No. 1907/2006 (REACH)

Date created: 27.03.2018

Date revised: 27.03.2018



## Badamid UL A703 GF20 FR HF

### 1. Identification of the substance/mixture and of the company

#### 1.1. Product identifier

**Badamid UL A703 GF20 FR HF**

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Polymer

Recommended use: Polymer, for industrial processing only

#### 1.3. Details of the supplier of the safety data sheet

Bada AG  
E-Mail: [info@bada.de](mailto:info@bada.de)  
Untere Strut 1  
D-77815 Bühl/Baden

Fon: +49 (0) 72 23-940 77-0 (Mo.–Fr. 08:30–16:30 Uhr)

Fax: +49 (0) 72 23-940 77-77

Web: [www.bada.de](http://www.bada.de)

#### 1.4. Emergency telephone number

Giftinformationszentrum-Nord – Tel.: +49 (0) 551-19240

### 2. Hazards Identification

#### 2.1. Classification of the substance or mixture

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

#### 2.2. Label elements

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

#### 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered.

### 3. Composition/Information on Ingredients

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Chemical nature

Preparation based on: polyamide (PA 66), filler, flame retardant, synergists, additives, optionally pigments

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### Hazardous ingredients:

According to 1272/2008/EC

#### **Hexaborondizincundecaoxide**

content (w/w): =>0,1 % - <= 1%

CAS.No. 12767-90-7

EG-No. 235-804-2

Aquat. Acute Kat. 1, H400

Aquat. Chron. Kat. 2, H411

Reprod.tox. Kat. 2, H361d

## 4. First-Aid Measures

### 4.1. Description of first aid measures

Avoid contact with the skin, eyes and clothing.

#### If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

#### On skin contact with polymer melt:

a) Cool with water

b) Do not use force or solvents to remove product incrustations from affected skin areas

c) Medical treatment necessary

#### On contact with eyes:

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

#### On ingestion:

Rinse mouth and then drink plenty of water. If difficulties occur: Seek medical attention.

### 4.2. 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

### 4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically

## 5. Fire-Fighting Measures

### 5.1. Extinguishing media

Water spray, foam, dry powder, CO<sub>2</sub>

### 5.2. Special hazards arising from the substance or mixture

Avoid thermal decomposition (decomposition temperature cf. section 9).

On thermal decomposition, caused by overheating during processing or in case of fire, hazardous gases and fumes may develop. Cf. "hazardous decomposition products".

#### Hazardous decomposition products:

Mainly carbon monoxide, carbon dioxide and nitrogen oxides.

Further hydrocarbons (aliphatic and aromatic), amines, nitriles, aldehydes, ketones, acids, ammonia, hydrogen cyanide, ε-Caprolactam, cyclopentanone, Phosphine.

Under special circumstances, traces of other toxic components cannot be excluded. Formation of other decomposition products depends on burning conditions.

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### 5.3. Advice for fire-fighters

#### Special protective equipment:

Wear a self-contained breathing apparatus, as toxic gases and carbon monoxide may be formed.

Wear protective clothing and face protection.

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

## 6. Accidental Release Measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Granules: Special danger of slipping by leaking/spilling product. Take up mechanically

Schmelze: Danger of exothermal decomposition. Cool down using water.

### 6.2. Environmental precautions

No special precautions necessary.

### 6.3. 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.

### 6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

## 7. Handling and Storage

### 7.1. Precautions for safe handling

Take precautionary measures against static discharges. Do not breathe dust.

When the product is chopped or ground, dust explosion regulations have to be considered. Use closed systems. Provide exhaust ventilation. Do not breathe fumes.

### 7.2. Conditions for safe storage, including any incompatibilities

Protect against moisture. Suitable materials for containers: Polyethylen.

Any molten material can self-ignite when in open atmosphere.

During stoppages in production or material changes, it is recommended to inject material into the mould in order to avoid the contact of molten material with air. It is advisable to dispose molten material into water containers.

### 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## 8. Exposure Controls/Personal Protection

### 8.1. Control parameters

Components with occupational exposure limits:

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7803-51-2: phosphine  
TWA value 0.14 mg/m<sup>3</sup> ; 0.1 ppm (OEL (EU)) indicative  
STEL value 0.28 mg/m<sup>3</sup> ; 0.2 ppm (OEL (EU)) indicative

The limit values are expected not to be achieved if the product is processed proper and suitable ventilation is provided.

### 8.2. Exposure controls

Personal protective equipment:

Respiratory protection: Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection (type P2) if ventilation is inadequate.

Hand protection: Use additional heat protection gloves when handling hot molten masses (EN 407), e.g. of textile or leather.

Eye protection: Safety glasses with side-shields (frame goggles) (e.g. EN 166)

General safety and hygiene measures: Do not eat, drink or smoke at work station. Wash hands and uncovered skin after work.

## 9. Physical and Chemical Properties

<b>Form:</b>	Granules
<b>Color:</b>	various, depending on the colourant
<b>Odour:</b>	odourless
<b>Odour threshold:</b>	not applicable
<b>Melting temperature:</b>	approx. 262 °C
<b>Boiling range:</b>	not applicable, product decomposes
<b>Flash point:</b>	not applicable
<b>Evaporation rate:</b>	not applicable
<b>Flammability</b>	not applicable
<b>Lower explosion limit:</b>	not applicable, product decomposes
<b>Explosion risk:</b>	no risk of explosion
<b>Decomposition temperature:</b>	310 °C (TGA)
<b>Ignition temperature :</b>	> 350 °C
<b>Self ignition temperature:</b>	> 350 °C
<b>Relative density:</b>	no data available
<b>Relative vapor density:</b>	not applicable
<b>Vapor pressure:</b>	not applicable
<b>Viscosity:</b>	not applicable
<b>Solubility in water:</b>	insoluble
<b>pH value:</b>	not applicable
<b>Partitioning coefficient n-octanol/H<sub>2</sub>O</b>	not applicable
<b>Viscosity, kinematic:</b>	not applicable, the product is a solid
<b>Density:</b>	1.2 – 1.6 g/cm <sup>3</sup>
<b>Bulk density:</b>	approx. 700 kg/m <sup>3</sup>

## 10. Stability and Reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

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

### 10.4. Conditions to avoid

Avoid temperatures above decomposition temperature (cf. Section 9). Upon thermal decomposition, e.g. by overheating during processing, or in case of fire, hazardous gases and vapors may be formed. Cf. "hazardous decomposition products".

### 10.5. Incompatible materials

No substances known that should be avoided.

### 10.6. Hazardous decomposition products:

Mainly carbon monoxide and nitrogen oxides.

Further hydrocarbons (aliphatic and aromatic), amines, nitriles, aldehydes, ketones, acids, ammonia, hydrogen cyanide,  $\epsilon$ -Caprolactam, cyclopentanone, Phosphine.

Under special circumstances, traces of other toxic components cannot be excluded. Formation of other decomposition products depends on burning conditions.

## 11. Toxicological Information

### Acute toxicity:

Contact with molten product may cause thermal burns.

### Irritation:

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

### Contact with eyes:

Eye contact with granules may cause eye irritation.

### Respiratory/Skin 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.

### Germ cell 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:

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

### Reproductive toxicity:

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

### Specific target organ toxicity (single exposure):

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

### Specific target organ toxicity (repeated exposure):

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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.

Other relevant toxicity information:

None.

## 12. Ecological Information

### 12.1. Toxicity

Assessment of aquatic toxicity: There is a high probability that the product is not acutely harmful to aquatic organisms, due to the chemical structure and insolubility in water.

### 12.2. Persistence and degradability

Experience shows this product to be inert in water and non-degradable. The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

### 12.3. Bioaccumulative potential

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

### 12.4. Mobility in soil

Study scientifically not justified due to product consistency and insolubility in water.

### 12.5. Results of PBT and vPvB assessment

The product is not persistent/bioaccumulative/toxic.

## 13. Disposal Considerations

Check for possible recycling. The preparation can be molten and processed several times. Consider sorting accuracy and cleanliness of plastics.

Incinerate in suitable incineration plant, or landfill as consumer waste, observing local authority regulations.

Waste code according to European waste catalogue:

070213 Waste plastic

Contaminated packaging:

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

## 14. Transport Information

### Land transport

ADR / RID

Not classified as a dangerous good under transport regulations.

UN number:

Not applicable

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UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

### Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations.

UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known
Transport in inland waterway vessel:	Not evaluated

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations.

UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known
Transport in inland waterway vessel:	Not evaluated

### Air transport

IATA / ICAO

Not classified as a dangerous good under transport regulations.

UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

### Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

## 15. Regulatory Information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Product is not classified as hazardous.

### 15.2. Chemical Safety Assessment

Chemical Safety Assessment not required.

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### 16. Other Information

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

H361d: Suspected of damaging the unborn child  
H400: Very toxic to aquatic life  
H411: Toxic to aquatic life with long-lasting effects

The preparation must not be used to produce medical parts which are intended as a permanent implant in the human body.

The information in this material safety data sheet have been compiled carefully and represent the state of our knowledge at the issue date. They are intended to give advice for the safe and proper handling, transport, storage and disposal of the product to the industrial or commercial user. The information is not transferable to other products. The information does not guarantee certain product properties.

Recipients to our products must take responsibility for observing existing laws and regulations.