

# Material Safety Data Sheet

## PA6

### SECTION 1: Hazards identification

#### 1.1 Classification of the substance or mixture

Product definition: mixture

#### Classification according to EG regulation 1272/2008 [CLP/GHS]

Not rated.

The product is not classified as dangerous according to Regulation (EC) 1272/2008 and its amendments.

#### Remarks:

Danger of slipping on spilled product. Heating may cause burns. Discharge or processing of this material may result in electrostatic charge. If necessary, take precautionary measures against static discharges. The likelihood of health impairment in normal use of the product is considered to be very low. In the case of secondary processing of the product, appropriate precautions should be taken. If dusts, vapors or mist are formed during operation, use ventilation to keep airborne exposure below the exposure limit. Dust may cause mechanical irritation.

#### 1.2 Label elements

##### Hazard Pictograms:

**Signal word:** No signal word.

**Hazard statements:** No known significant effects or critical hazards.

**Complementary  
Marking elements:** Not applicable.

#### Safety instructions

**Prevention:** Not applicable.  
**Reaction:** Not applicable.  
**Storage:** Not applicable.  
**Disposal:** Not applicable.  
**Hazardous ingredients:**

#### 1.3 Other hazards

##### Other hazards which do not result in classification:

Heating may cause burns.

### SECTION 2: Composition / information on ingredients

**2.1 Substances / 2.2 Mixtures:** mixture

**Chemical characterization:** Base polymer: Polyamid 6; CAS-Nr. 25038-54-4

There are no additional ingredients which, according to the supplier's current knowledge, are classified as hazardous to health or the environment, are PBT or vPvB substances or have a workplace exposure limit and therefore should be indicated in this section.

#### Remarks:

The components of this product are embedded in an impermeable matrix and are therefore not biologically available. Hazardous ingredients are bound in the polymer matrix and are therefore a negligible risk to hazards under normal processing and handling conditions. Additives present in this product do not pose a health risk if they are not released during processing (melting smoke, dusts). Appropriate operational hygiene measures must be taken to avoid contact with (dust) dust and smoke.

By using suitable ventilation systems, the contact with (smelting) smoke should be kept as low as possible. Dust and smoke generated during secondary processing may irritate the respiratory tract and the skin and should be considered potentially hazardous. If dusts, vapors or mist are formed during operation, use ventilation to keep airborne exposure below the limits.

## SECTION 3: First aid measures

### 3.1 Description of first aid measures

**Eye contact:**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for contact lenses and remove if present. If irritation occurs, consult a doctor.

**Inhalation:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of the combustion products, symptoms may be delayed. The affected person may need to remain under medical supervision for 48 hours.

**Skin contact:**

Rinse contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Do not remove clothing that adheres to the skin.

**Swallowing:**

Rinse mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless instructed by a medical professional. Get medical attention if symptoms occur.

**Protection of first responders:**

No action shall be taken involving any personal risk or without suitable training.

### 3.2 Most important symptoms and effects, both acute and delayed

**Potential acute health effects****Eye contact:**

No known significant effects or critical hazards.

**Inhalation:**

The effects of the decomposition products can cause health damage. After exposure, serious damage may be delayed.

**Skin contact:**

Heated material can cause thermal burns that cause pain, redness and blistering.

**Swallowing:**

No known significant effects or critical hazards.

**Signs / symptoms of overexposure****Eye contact:**

No specific data.

**Inhalation:**

No specific data.

**Skin contact:**

No specific data.

**Swallowing:**

No specific data.

### 3.3 Indication of any immediate medical attention and special treatment needed

**Informations for the doctor :**

Inhalation of the combustion products may cause symptoms to be delayed. The affected person may need to remain under medical supervision for 48 hours.

**Special treatments:**

No special treatment.

## SECTION 4: Firefighting measures

### 4.1 Extinguishing media

#### Little fire

Suitable: Dry powder or CO<sub>2</sub>.

Not suitable: Not known.

#### Big fire

Suitable: Use water, foam or dry powder.

Not suitable: Not known.

### 4.2 Special hazards arising from the substance or mixture

#### Hazards arising from the substance or mixture:

No special fire or explosion hazard.

#### Hazardous combustion products:

Hazardous decomposition products such as carbon monoxide, carbon dioxide, black smoke, aldehydes, organic acids, nitric oxides (NO, NO<sub>2</sub>, etc.), ammonia (NH<sub>3</sub>), Hydrogen cyanide (HCN) and amines can occur during a fire.

### 4.3 Advice for firefighters

#### Special protective measures for firefighters:

Avoid contact with heated material.

#### Special protective equipment for firefighters:

Firefighters should wear appropriate protective clothing and self-contained breathing apparatus with full face protection, which are operated in the overpressure mode. Clothing for firefighters (including helmets, protective boots and protective gloves) complying with the European standard EN 469 provides a basic protection against accidents involving chemicals.

## SECTION 5: Accidental release measures

### 5.1 Personal precautions, protective equipment and emergency procedures

#### Non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate the environment. Unauthorized and unprotected personnel are prohibited from access. Do not touch or walk into spilled substance. Put on suitable personal protective equipment.

#### Employees:

If special clothing is required to deal with the spillage, take note of section 8 on suitable and unsuitable materials. See also information in „For persons who are not rescue workers“.

### 5.2 Environmental protection measures:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the competent authorities if the product has caused environmental pollution (sewage systems, surface waters, soil or air).

### 5.3 Methods and material for containment and cleaning up

#### Small released set:

Remove the container from the outlet area. Material should be absorbed or repelled and placed in a correspondingly labeled waste container. Dispose of in an approved waste disposal company.

#### Great released set:

Remove the container from the outlet area. Avoid entry into sewers, waterways, basements or enclosed areas. Material should be absorbed or repelled and placed in a correspondingly labeled waste container. Dispose of in an approved waste disposal company. Note: See section 1 for emergency contact persons and section 13 for disposal information.

### 5.4 Reference to other sections:

See section 1 for emergency contact information.

See section 8 for information on suitable personal protective equipment.

See Section 13 for additional waste treatment information.

## SECTION 6: Handling and storage

The information in this section provides general advice and guidance. The list of identified uses in section 1 should be included for each application-specific information in the exposure scenario / exposure scenarios.

### 6.1 Precautions for safe handling

#### Protective measures:

Use only with adequate ventilation. Local trigger must be provided. Prevent dust formation and distribution by wind. Take measures against static discharges. Keep away from sources of ignition.

#### Advice on general work hygiene:

Eating, drinking and smoking should be prohibited in areas where this substance is used, stored or processed. Persons who are exposed to the substance must wash their hands and face before eating, drinking or smoking. Remove contaminated clothing and protective equipment before entering the eating area. See section 8 for further information on hygiene measures.

### 6.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in a dry, cool and well-ventilated place away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers which have been opened must be carefully resealed and stored upright to prevent leakage. Do not store in unlabelled containers. To avoid environmental contamination use a proper container. Store in the original container and protect from direct sunlight.

### 6.3 Specific end use(s)

#### Recommendations:

Not available.

#### Specific solutions for the industrial sector:

Not available.

#### Remarks:

Do not stack more than 2 pallets on top of each other. Big bags should not be stacked on top of each other. Pallets are not to be stacked on one another along corridors. If the material is delivered in the large silo, the silo can contain a maximum of 0.5 bar dry air. Pressure relief via the ventilation line. Never use the access opening for the pressure relief.

## SECTION 7: Exposure controls/personal protection

The information in this section provides general advice and guidance. Information provided is based on typical anticipated uses of the product. When handling large quantities or other uses which can significantly increase the exposure of workers or the release into the environment, additional measures may be necessary.

### 7.1 Control parameters

#### Workplace exposure limits

##### Name of the product / ingredient

No exposure limit value known.

##### Exposure limit values

#### Recommended monitoring procedures:

If this product contains ingredients with exposure limits, personal, atmospheric (at work) or biological monitoring may be required to determine the effectiveness of ventilation or other control measures and / or the need to use respiratory protection equipment. Reference should be made to standards of verification, such as the following: European Standard DIN EN 689 (Occupational Atmospheres - Guidance for the determination of inhaled exposure to chemical substances for comparison with limit values and measurement strategy) European Standard DIN EN 14042 (Occupational Atmospheres - Guidelines for Application and The use of procedures and devices for the determination of chemical and biological substances) European standard DIN EN 482 (Occupational Atmospheres - General requirements for the performance of methods for the measurement of chemical substances) Reference to national guidance documents for methods for the determination of hazardous substances is also required.

#### DNELs/DMELs

There are no DNELs / DMELs values.

#### PNECs

There are no PNECs values.

## 7.2 Exposure controls

### Suitable technical control devices:

Good standard room ventilation should be sufficient to limit the exposure of workers to air pollution.

### Individual protection measures

#### Hygienic measures:

Wash hands, forearms and face thoroughly after handling chemical products and at the end of the working day as well as before eating, smoking and toilets. Choose suitable methods for the disposal of contaminated clothing.

Wash contaminated clothing before reuse. Make sure there are eyewash stations and safety showers near the work area.

#### Eye / face protection:

Safety glasses with side panels. When handling hot material, heat resistant protective gloves, protective clothing and face protectors that are resistant to the temperature of the molten product are to be applied.

#### Hand protection:

Wear suitable protective gloves. When handling hot material, heat resistant protective gloves which are resistant to the temperature of the molten product are to be applied.

#### Skin and body:

Workwear.

#### Respiratory protection:

No special protective measures required. In case of insufficient ventilation wear suitable respiratory equipment.

#### Limiting and monitoring the environmental position:

Emissions from ventilation and process equipment should be checked to ensure that they meet the requirements of environmental protection legislation. In some cases, scrubber scrubbers, filters or technical modifications to the process equipment will be required to reduce emissions to acceptable levels.

Recommendation on personal protection applies to a high level of exposure. Appropriate personal protective equipment should be selected on the basis of a risk assessment of the current exposure.

## SECTION 8: Physical and chemical properties

### 8.1 Information on basic physical and chemical properties

<b>Physical state:</b>	Solid. [Tablets.]
<b>Colour:</b>	Opaque, depending on Added pigment
<b>Odor:</b>	Not available.
<b>Odor threshold:</b>	Not available.
<b>PH value:</b>	Not available.
<b>Melting point / freezing point:</b>	220 bis 230 °C
<b>Initial boiling point and boiling range:</b>	Not available.
<b>Softening range:</b>	Not available.
<b>Flash point:</b>	>355 °C
<b>Evaporation rate:</b>	Not available.
<b>Flammability (solid, gaseous):</b>	Not available.
<b>Upper / Lower Flammability or explosive limits:</b>	Not available.
<b>Steam pressure:</b>	Not available.
<b>Steam density:</b>	Nicht verfügbar.
<b>Relativ density:</b>	1.1 to 1.3 (water = 1)
<b>Density (g / cm<sup>3</sup>):</b>	1.1 bis 1.3 g/cm <sup>3</sup>
<b>Bulk density:</b>	Not available.

<b>Solubility:</b>	Insoluble in the following materials: cold water.
<b>Water solubility:</b>	Not available.
<b>Distribution coefficient: n- octanol / water:</b>	Not available.
<b>Auto-ignition temperature:</b>	> 420 °C
<b>Decomposition temperature:</b>	>300°C
<b>Viscosity:</b>	Not available.
<b>Explosive properties:</b>	Not available.
<b>Oxidizing properties:</b>	Not available.

## 8.2 Other information

<b>Minimum ignition temperature:</b>	450 °C
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## SECTION 9: Stability and reactivity

### 9.1 Reactivity:

No specific data on the reactivity are available for this product or its ingredients.

### 9.2 Chemical stability:

The product is stable.

### 9.3 Possibility of hazardous reactions:

Under normal conditions of storage and use, hazardous reactions will not occur.

### 9.4 Conditions to avoid:

No specific data.

### 9.5 Incompatible materials:

No specific data.

### 9.6 Hazardous decomposition products:

No specific data.

### Remarks:

At processing temperature, thermal decomposition may occur to a certain extent. See section 5.

## SECTION 10: Toxicological information

### 10.1 Information on toxicological effects

#### Acute toxicity

Conclusion / Summary: Not available.

Acute toxicity: Not available.

#### Irritation / burns

Conclusion / Summary

Eyes: Not available.

Skin: Not available.

Respiratory: Not available.

#### Sensitization

Conclusion / Summary

Skin: Not available.

Respiratory: Not available.

**Mutagenicity**

Conclusion / Summary Not available.

**Carcinogenicity**

Conclusion / Summary Not available.

**Reproductive toxicity**

Conclusion / Summary Not available.

**Teratogenicity**

Conclusion / Summary Not available.

**Specific target organ toxicity for single exposure**

Not available.

**Specific target organ toxicity on repeated exposure**

Not available.

**Aspiration hazard**

Not available.

**Potential acute health effects**

**Eye contact:**

No known significant effects or critical hazards.

**Inhalation:**

The effects of the decomposition products can cause health damage. After exposure, serious damage may be delayed.

**Skin contact:**

Heated material can cause thermal burns that cause pain, redness and blistering.

**Swallowing:**

No known significant effects or critical hazards.

**Possible chronic effects on health**

Product / ingredient name	Result	Species	Dose	Exposure
Not available.				

Not available.

Conclusion / Summary

Not available.

**General:**

No known significant effects or critical hazards.

**Carcinogenicity:**

No known significant effects or critical hazards.

**Mutagenicity:**

No known significant effects or critical hazards.

**Teratogenicity:**

No known significant effects or critical hazards.

**Impact on development:**

No known significant effects or critical hazards.

**Effects on fertility:**

No known significant effects or critical hazards.

**Remarks:**

The components of this product are embedded in an impermeable matrix and are therefore not biologically available. The likelihood of health impairment in normal use of the product is considered to be very low.

**SECTION 11: Ecological information**

**11.1 Toxicity**

Conclusion / Summary

Not available.

**11.2 Persistenz und Abbaubarkeit**

Conclusion / Summary

Not available.

**11.3 Bioaccumulation potential**

#### 11.4 Mobility in the ground

**Distribution coefficient soil / water (KOC):** Not available.

**Mobility:** Not available.

#### 11.5 Results of PBT and vPvB assessment

**PBT:** Not available.

**vPvB:** Not available.

#### 11.6 Other adverse effects:

No known significant effects or critical hazards.

#### Remarks:

The components of this product are embedded in an impermeable matrix and are therefore not biologically available. This product is biologically non-degradable and non-toxic to aquatic organisms.

### SECTION 12: Disposal considerations

The information in this section provides general advice and guidance. The list of identified uses in section 1 should be included for each application-specific information in the exposure scenario / exposure scenarios.

#### 12.1 Waste treatment methods

##### Product

##### Disposal methods:

The generation of waste should be avoided or minimized wherever possible. Disposal of this product and its solutions and by-products must always be carried out in compliance with environmental requirements and waste disposal legislation, as well as the requirements of local authorities. Dispose of surpluses and non-recyclable products through an approved waste disposal company. Dispose of waste untreated into sewage system unless all applicable regulations of the authorities are complied with. Packing waste should be recycled. Incineration or landfilling should only be considered when recycling is not feasible. Wastes and containers must be disposed of in a safe manner. Empty containers and linings may contain product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

#### Hazardous waste:

According to the supplier's current knowledge, this product is not to be regarded as hazardous waste within the meaning of EU Directive 91/689 / EEC.

#### Packaging Disposal Methods:

The generation of waste should be avoided or minimized wherever possible. Packing waste should be recycled. Incineration or landfilling should only be considered when recycling is not feasible.

#### Special precautions:

Wastes and containers must be disposed of in a safe manner. Empty containers and linings may contain product residue. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### SECTION 13: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>UN-Number</b>	Not included.	Not included.	Not included.	Not included.
<b>UN proper shipping name: Shipping name</b>	-	-	-	-
<b>Transport hazard classifications</b>	-	-	-	-
<b>Packing group</b>	-	-	-	-
<b>Danger to the environment</b>	No	No	No	No
<b>Additional Information</b>	-	-	-	-

#### 13.1 Special precautions for user:

Transport on the works premises: transport only in closed containers which are vertical and fixed. Persons transporting the product must be instructed in the correct behavior in case of accident, leakage or spillage.

#### 13.2 Transport in bulk according to Annex II of the MARPOL Convention and the IBC Code

Not available.

#### Remarks:

If the material is delivered in the large silo, the silo can contain a maximum of 0.5 bar dry air. Pressure relief via the ventilation line. Never use the access opening for the pressure relief.

**SECTION 14: Regulatory information**

**14.1 Safety, health and environmental regulations / legislation specific for the substance or mixture**

EC Regulation (EC) No 1907/2006 (REACH)  
Annex XIV - List of substances subject to authorization

**Annex XIV**  
**None of the components are listed.**

**Substances of very high concern**  
None of the components are listed.

**Annex XVII - Restrictions on the manufacture and placing on the market and use of certain dangerous substances, mixtures and products**  
Not applicable.

**National rules**  
Storage class (TRGS 510): 13  
Water hazard class: nwg Anhang Nr. 4  
Technical Instructions Air: TA-Air Number 5.2.5: 0-5%  
TA-Air Number 5.2.1: 0-100%

**International regulations**

**Chemical Contracts, List I, II & III chemicals**

Name of the ingredient	List name	Status
Not listed.		

**Montreal Protocol (Annexes A, B, C, E)**

Name of the ingredient	List name	Status
Not listed.		

**Stockholm Convention on Persistent Organic Pollutants**

Name of the ingredient	List name	Status
Not listed.		

**The Rotterdam Convention on the Prior Informed Consent (PIC)**

Name of the ingredient	List name	Status
Not listed.		

**UNECE-Aarhus protocol on persistent organic compounds (POP) and heavy metals**

Name of the ingredient	List name	Status
Not listed.		

**Remarks:**  
Substances in this section are based on the fact that these substances are above the applicable concentration limits. Relevant explanations for this product are available upon request.

**14.2 Chemical Safety Assessment:**  
No substance safety assessment was carried out.

**SECTION 15: Other information**

**Procedure for deriving classification according to Regulation (EC) 1272/2008 (CLP / GHS)**

Classification	Justification
Not rated.	

**Full text of the abbreviated H sentences:** Not applicable.

**Full text of classifications [CLP / GHS]:** Not applicable.

**Information:**  
DSM Engineering Plastics BV, Global Research & Technology Department  
Product Data Management  
P.O. Box 1077, 6160 BB Geleen  
The Netherlands, Europe  
E-mail: productdatamanagement.dep@dsm.com

SDS:  
  
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P.O. Box 6500, 6401 JH Heerlen  
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**Changes to the previous version:**

Changes to the last version are marked with a small (blue) triangle.

**Abbreviations and acronyms:**

ATE = Acute toxicity

CLP = Regulation on classification, labeling and packaging [Regulation (EC) No 1272/2008]

DMEL = Derived minimum effect limit

DNEL = Derived non-effect limit

EUH-Satz = CLP-specific hazards

PBT = Persistent, bioaccumulative and toxic

PNEC = Estimated non-effect concentration

RRN = REACH Registration number

vPvB = Very persistent and very bioaccumulative

**Sources of the most important data:**

Literature data and / or examination reports are available from the manufacturer.

**Internal code:**

WW59213

**Training Instructions:**

Before using this substance / preparation, the affected personnel should be instructed using the safety data sheet.

**Notice to the reader**

The information in this safety data sheet is based on the data available at the time of publication. The information is intended to help the user master the handling risks; They shall not be construed as an assurance or specification of product quality. The information may not or does not apply to combinations of the product with other substances or to specific applications.

The user is responsible for taking appropriate precautions and convincing himself that the data is appropriate and sufficient for the intended purpose of the product. In the case of uncertainties, we recommend consulting the supplier or an expert.

**Story**

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**SECTION 16: Emergency contact****Contact:**

**Contact person:** Michael Elstner

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