

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

1. Description of substance or mixture and corporation

1.1 Produkt identifier

PENTALLOY BP H natur

1.2 Relevant identified applications of substance or mixture and non-recommended applications

Relevant identified application: Polymers
Appropriate application: Polymer for injection molding

1.3 Details of the supplier, providing the material safety data sheet

Pentac Polymer GmbH
Otto-Hahn-Straße 12
64823 Groß-Umstadt
Germany

Phone.: +49 6078 93 23 - 0 | Fax: +49 6078 93 23 - 99
Email: info@pentac.de

1.4 Emergency number

Pentac Polymer GmbH
Tel.: +49 6078 93 23 - 0
Mo.-Fr. 08 a.m. bis 17:00 p.m. (CET)

2. Potential Risks

2.1 Classification of the substance or mixture

According to Regulation (EG) No. 1272/2008 [CLP]
The product needs no classification according to GHS criteria.

2.2 Marking elements

Globally Harmonized System, EU (GHS)
The product needs no classification according to GHS criteria.

2.3 Other risks

According to regulation (EG) Nr. 1272/2008 [CLP].
Explosive dust-air mixture can be constituted by making a dispersion.
No other risks if specifications/recommendation for storage, use and handling are respected.

3. Composition/Information on Ingredients

3.1 Substances

Not applicable.

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

3.2 Mixtures

Chemical characterisation

Preparation based on: Polyamid - BP: Polyamid 6 + PP, additives (fillers, additives)

4: First Aid Measures

4.1 Description of First aid measures

Avoid contact with skin, eyes and clothing.

Inhalation:

On occurrence of irritation by vapors during thermal processing:

Ensure supply of fresh air, if necessary seek medical attention. After inhaling product dust: ensure supply of fresh air.

Skin contact:

Cool molten polyamide on the skin with copious cold water. Do not pull solidified polyamide from the skin. Medical attention is required for skin burns caused by molten material.

Eye contact:

Wash with copious water for 15 minutes. When irritations occur seek medical attention.

Swallowing:

Rinse mouth and drink copious water. When irritations occur seek medical attention.

4.2 Important acute and delayed symptoms and effects

Symptoms: No specific symptoms known so far for this product

4.3 Medical first aid or special treatment

Treat symptomatically.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

water spray, foam, dry powder, carbon dioxide

Non suitable extinguishing media:

Water jet

5.2 Special hazards during fire-fighting

In case of fire, the following can be released: carbon monoxide, carbon dioxide, nitrogen oxide, organic decomposition products.

Under certain fire conditions, traces of other toxic products can be released in case of fire.

5.3 References for fire-fighting

Special protection equipment:

Further information:

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

The information herein contained describe the products based on our real knowledges. They are offered in good faith but without guarantee and can be changed without previous notice. The user shall always ensure to meet any local regulation pertaining to the product, industrial hygienic measures and working security.

Last update: 05.07.2018

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

6. Accidental Release Measures

Slip hazard by spilled product.

6.1 Personal protection

No special measures necessary.

6.2 Environmental protection

No special measures necessary.

6.3 Methods and materials for retention and cleaning

Smaller and bigger volumes: collect with suitable equipment.

6.4 Reference to other paragraphs

Information concerning limitation and control of exposure, personal protection equipment and disposal can be taken from paragraphs 8 and 13.

7. Handling and Storage

7.1 Protection measures for safe handling

Avoid inhalation of dusts/mists/vapours. Exhaust ventilation at processing machines is required during thermal processing and/or machining.

Protection against fire and explosion: Take precautionary measures against static discharges.

7.2 Safe storage conditions considering incompatibilities

Segregate from foods and animal feeds.

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Aluminium, Carbon steel (Iron)

Storage stability: Protect against moisture.

7.3 Specific final usage

For relevant identified use according to paragraph 1 please respect references of paragraph 7

8. Limitation and Control of Exposure/ Personal Protection

8.1 Parameters to control

According the technical guideline for the handling of hazardous materials the following workstation limit value has to be kept.

A-dust particle size 1.25 mg/m³

E-dust particle size 10 mg/m³

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

8.2 Limitation and control of exposure

Personal protection equipment

Respiratory protection:

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. (Particle filter EN 143 P2 or FFP2)

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)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

No special precautions necessary. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. After use of gloves apply skin-cleaning agents and skin cosmetics.

Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

Eye protection:

Wear suitable safety glasses (e.g. EN 166)

Body protection:

Choose body protection depending on process and possible impact, e.g. blanket, safety shoes min. S1, tight-fitting protection clothes.

General protection and hygiene measures

No special measures necessary. Avoid formation and inhalation of dust, vapor or smoke. Provide appropriate ventilation. After use of gloves apply skin cleaning and protection media

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

9. Physical and chemical properties

9.1 Description of general physical and chemical properties

State of matter	solid
Colour	individual, based on used pigments
Odour	odourless
Melting temperature	about approx. 220°C 1.013 hPa, DIN 53765
Boiling range	The substance / product decomposes therefore not determined.
Flammability	not self-igniting
Lower explosion limit	For solids not relevant for classification and labelling.
Flash point	not applicable
Auto-ignition temperature	> 400°C (ASTM D1929)
Thermal decomposition	> 320 °C TGA
Thermal decomposition	> 320 °C TGA
pH value	not applicable
Viscosity, kinematic	not applicable, the product is a solid
Solubility in water	insoluble (20 °C, 1,013 hPa)
Partitioning coefficient n-octanol/water (log Kow)	not applicable
Vapour pressure	not applicable
Density	1.10 - 1.60 g/cm ³ (20 °C, 1,013 hPa)
Relative density	Study does not need to be conducted.
<u>Particle characteristics:</u>	
Specific Surface Area:	0.0 m ² /g

9.2 Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: not explosive

Oxidizing properties

Fire promoting properties: not fire-propagating

Pyrophoric properties

Self-ignition temperature: not self-igniting

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of spontaneous heating according to UN transport regulations class 4.2.

Corrosion to metals

No corrosive effect on metal.

Other safety characteristics

Bulk density: 500 - 800 kg/m³ (20 °C, 1,013 hPa)

Evaporation rate: The product is a non-volatile solid.

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

10. Stability und Reactivity

10.1 Reactivity

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

10.2 Dangerous reactions

Do not connect hot melt with water.

10.3 Dangerous reactions

No hazardous reactions known. The product is chemically stable.

10.4 Conditions to avoid

Temperature: > 320°C, See SDS section 7 - Handling and storage

10.5 Incompatible materials

Substances to avoid: No substances known that should be avoided.

10.6 Dangerous decomposition products

Carbon monoxide, carbon dioxide, hydrogen cyanide, aminderivate, nitriles

11. Toxicological Information

11.1 Information on toxicological effects

Assessment of acute toxicity:
Contact to molten product might cause burns.

Assessment of irritation effects:
Based on our experience and information product does not cause any harmful effects to health if handled and used appropriately.

Experimental/calculated data:
Serious eye damage/irritation: mechanical irritation possible.
Sensitization of skin and respiratory system

Assessment of sensitization:
Based on our experience and information product does not cause any harmful effects to health if handled and used appropriately.

Assessment mutagenicity:
Based on our experience and information product does not cause any harmful effects to health if handled and used appropriately.

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

Germ cell mutagenicity

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.

Assessment carcinogenicity:

Based on our experience and information product does not cause any harmful effects to health if handled and used appropriately.

Assessment of reproducibility:

Based on our experience and information product does not cause any harmful effects to health if handled and used appropriately.

Assessment STOT simple:

Not applicable

Assessment of toxicity after repeated application:

Based on our experience and information product does not cause any harmful effects to health if handled and used appropriately.

Aspiration risk:

No aspiration risk expected.

Interactive effects:

No data available.

Other toxicity information

Based on our experience and information product does not cause any harmful effects to health if handled and used appropriately

11.2 Information about other hazards

Endocrine disrupting properties

The product does not contain any substance attributed with endocrine disrupting properties according to EU REACH Article 57(f).

Other relevant toxicity 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.

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

12. Environmental Information

12.1 Toxicity

Assessment of aquatic toxicity:

Product was not tested. Assessment based on chemical structure of product. High probability of no aquatic toxicity.

12.2 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.

Elimination information:

Poorly biodegradable.

Assessment of stability in water:

According to structural properties, hydrolysis is not expected/probable.

12.3 Potential of bio accumulation

Assessment bioaccumulation potential:

Does not significantly accumulate in organisms.

Bioaccumulation potential:

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

12.4 Soil mobility

Assessment transport between environmental compartments:

Adsorption in soil: Adsorption to solid soil phase is not expected.

12.5 Results of PBT- and vPvB-Assessment

Does not comply with criteria of PBT (persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative)

12.6 Endocrine disrupting properties

The product does not contain any substance attributed with endocrine disrupting properties according to EU REACH Article 57(f).

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

12.7 Other harmful effects

Product does not contain any substances listed in Regulation (EG) 1005/2009 on substances damaging the ozone layer.

12.8 Other harmful effects

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

Other ecotoxicological advice:

The product is a polymeric compound.

13. Information on Disposal

13.1 Process for waste disposal

Check for possible recycling.

Incinerate in suitable incineration plant, observing local authority regulations.

The waste codes are manufacturer's recommendations based on the designated use of the product. Other use and special waste disposal treatment on customer's location may require different waste-code assignments.

Waste key:

07 02 13 waste plastic

Contaminated packaging:

Packs must be completely emptied.

Completely emptied packagings can be given for recycling.

14. Information on transport

Land Transport

ADR: Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class: Not applicable

Packaging group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

Precautions measures for user: None known

RID: Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class: Not applicable

Packaging group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

Precautions measures for user: None known

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

Inland waterway transport

ADN: Not classified as a dangerous good under transport regulations
UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class: Not applicable
Packaging 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 or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class: Not applicable
Packaging group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Air transport

IATA/ICAO: Not classified as a dangerous good under transport regulations
UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class: Not applicable
Packaging group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

EU-Safety Data Sheet



Material safety data sheet according to European Regulation (EG) No. 1907/2006 as amended from time to time. Print date: 20.05.2024

Updated:	05.07.2018
Trade Name:	PENTALLOY BP H natural
Product-Number:	6100.004

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Relevant Legislation

15.1 Regulation on safety, health and environment/ specific regulation for substance or mixture

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006

Restrictions of Regulation (EC) No 1907/2006, Annex XVII, do not apply for the intended use(s) of the product given in this SDS.

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):

Listed in above regulation: no

15.2 Assessment of substance safety

Chemical Safety Assessment not required

Product is not classified as hazardous.

A safety data sheet for this product is legally not required and is provided by us just as a courtesy to our customers.

16. Other information

Preceding information in this material safety sheet are based on our actual knowledge and experience and describe the product with respect to its safety requirements. This product information is by no means intended as description of product properties (specification). No specific property or suitability for practical application can be derived from this safety data sheet. Compliance with legislation, regulation and property rights underlie the recipients responsibility.