

PA-12

SAFETY DATA SHEET

1. Hazards identification

1.1 Classification of the substance or mixture classification (REGULATION (EC) No 1272/2008)

Classification according to Regulation (EC) N° 1272/2008 (CLP):

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Classification as per Directive 67/548/EC or Directive 1999/45/EC

Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 1999/45/EC.

1.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

1.3 Other hazards

Dust can occur through abrasion if the granulate is subjected to mechanical loading. Risk of skin burns caused by hot melt. A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

2. Composition/information on ingredients

2.1 Composition of the substance

Polyamide, microcrystalline. With colorants

3. First aid measures

3.1 Description of first aid measures

Pay attention to self-protection.

Move out of dangerous area.

Keep warm, position comfortably, and cover well.

Do not leave affected persons unattended.

If inhaled:

In case of symptoms of irritation caused by vapours in thermal processing, move subject to fresh air and seek medical advice if necessary. Treat symptomatically.

In case of skin contact:

Cool melted product on skin with plenty of water. Do not remove solidified product.

In case of burns by molten product medical treatment is necessary.

In case of eye contact:

If easy to do, remove contact lens, if worn. In case of pellets or powder, flush with plenty of water for at least 15 minutes. Seek medical advice if any dust particles still remain. In case of gases evolving from melted resin of high temperature, flush with plenty of water for at least 15 minutes. Seek medical advice if necessary

3.2 Most important symptoms and effects, both acute and delayed

Symptoms: No experiences of acute or chronic damages in humans are known.

Hazards: Risk of skin burns caused by hot melt.

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

Continue with first aid measures.

Depending on the pathology and clinical findings, patient monitoring and symptomatic treatment are necessary.

4. Fire fighting measures

4.1 *Extinguishing media*

Suitable extinguishing media:

Water, foam, dry chemical powder, Carbon dioxide fire extinguishers

Unsuitable extinguishing media:

Full water Jet

4.2 *Special hazards arising from the substance or mixture*

Hazardous Combustion Products:

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: carbon monoxide, carbon dioxide, nitric oxides, organic products of decomposition. Under certain fire conditions, traces of other toxic products may occur.

4.3 *Advice for fire fighters*

Protective equipment:

Self contained breathing apparatus (SCBA).

5. Accidental release measures

5.1 *Personal precautions, protective equipment and emergency procedures*

Keep out of irrigation ditches, sewers, and water supplies. Spills should be collected to prevent contamination of waterways.

Ensure adequate ventilation and avoid dust inhalation

5.2 *Environmental precautions*

Should not be released into the environment.

5.3 *Methods and materials for containment and cleaning up*

Sweep up and contain spilled material if possible. Risk of slipping. Collect in suitable and properly labelled containers. Avoid dust formation.

5.4 *Reference to other sections*

Refer to section (8)

6. Handling and storage

6.1 *Handling*

Avoid contact with molten polymer. Avoid generation of dust and electrostatic charge.

In case of thermal processing, provide for extraction of the vapours or adequate ventilation.

6.2 *Conditions for safe storage, including any incompatibilities*

Protect against moisture. Store dry and keep packaging closed when not in use.

Avoid sources of ignition, avoid dust formation. Stable under recommended storage conditions.

7. Exposure controls/personal protection

7.1 Control parameters

Exposure limits for dust

CAS-No. -		
Control parameters	10 mg/m ³	Time Weighted Average (TWA):(EH40 (UK))
type of exposure: Inhalable dust		
Control parameters	4 mg/m ³	Time Weighted Average (TWA):(EH40 (UK))
type of exposure Respirable dust		

7.2 Exposure controls

Engineering measures:

In case of thermal processing, provide for extraction of the vapours or adequate ventilation.

In case of dust being formed, provide for adequate extraction

Personal protection:

Eye protection:

Wear safety glasses for general purpose. Wear chemical goggles for cleaning moulding machines.

Respiratory protection:

The wearing of a dust mask is sufficient in the event of dust occurring, e.g. during conveyance of the granulate or filter cleaning operations. Do not inhale vapours from hot product. Should vapours inadvertently manage to permeate into the surrounding air during thermal processing, then gas masks fitted with filters designed to combat organic vapours (e.g. A 2) or breathing apparatus with an independent air supply are to be worn. Note time limit for wearing respiratory protective equipment.

Hand protection: not required.

General safety and hygiene measures

Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke.

Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied.

Hygiene measures:

Do not wear contaminated clothing.

Wash hands before breaks and at the end of workday.

Smoking, eating and drinking should be prohibited in the application area.

8. Physical and chemical properties

8.1 Information on basic physical and chemical properties

Appearance:	Solid Filament
Odour:	Odourless
Colour:	Neutral, depending on product grade
Odour threshold:	Not determined
pH:	Not applicable
Melting point / freezing point:	258 °C
Initial boiling point and boiling range:	Not applicable
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not available

Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Relative density:	Ca. 1.02 (20°C)
Bulk density:	Not available
Solubility(ies):	Practically insoluble
Partition coefficient (n-octanol/water):	Not available
Auto-ignition temperature:	The substance or mixture is not classified as pyrophoric
Decomposition temperature:	>300°C
Viscosity:	Not applicable
Explosive properties:	Not explosive
Oxidizing properties:	Not oxidizing
8.2 Other Information	
Formation of flammable gases:	The substance or mixture does not emit flammable gases in contact with water.
Ignition temperature:	not determined
peroxides:	The substance or mixture is not classified as organic peroxide.
Metal corrosion:	Not corrosive to metals.
Vapour density:	Not applicable

9. Stability

9.1 Reactivity:

Stable under normal handling and storage conditions

9.2 Chemical stability:

Stable under normal handling and storage conditions

9.3 Possibility of hazardous reactions:

No hazardous reactions observed under normal handling and storage conditions
Do not bring hot smelt into contact with water at risk of steam formation.

9.4 Conditions to avoid:

While printing, keep away from sparks and open flame. Exposure to elevated temperatures can cause product to decompose.

9.5 Incompatible materials:

None known

9.6 Hazardous decomposition products

Decomposition products on thermal decomposition
carbon monoxide, carbon dioxide
Nitrogen oxides (NOx)
organic products of decomposition

10. Toxicological information

10.1 Information on toxicological effects

Toxicological effects:

The properties of this product which are hazardous to health have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification".

11. Ecological information

11.1 Toxicity

Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life

11.2 Persistence and degradability

This water-insoluble polymeric solid is difficult to decompose.

11.3 Bioaccumulative potential

To avoid bioaccumulation plastics should not be disposed in the sea or in other water environments.

11.4 Mobility in soil

No data available

11.5 Results of PBT and vPvB assessment

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out

11.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

The properties of this product which are characteristics posing a threat to the environment have been calculated as per regulation (EC) No.1272/2008.

See section 2 "Hazards Identification"

12. Disposal considerations

12.1 Waste treatment methods

With respect to local regulations, e.g. dispose of to suitable waste incineration plant.

No waste key number as per the European Waste Types List can be assigned to this product, since such classification is based on the (as yet undetermined) use to which the product is put by the consumer. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority.

13. Transport information

Product has been classified as being non-dangerous substance according to transport regulations.

13.1 UN number

Not applicable

13.2 UN proper shipping name

Not applicable

13.3 Transport hazard class(es)

Not applicable

13.4 Packing Group

Not applicable

13.5 Environmental hazards

No additional data is available

13.6 Special precautions for user

No data available

14. Regulatory information

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

Registration:

USA (TSCA) listed/registered

Australia (AICS) listed/registered

Japan (MITI) listed/registered

Korea (KECI) listed/registered

Philippines (PICCS) listed/registered

China listed/registered

New Zealand listed/registered

Taiwan (ECS) listed/registered

Information on additional inventories on request

14.2 Chemical Safety Assessment

For this substance a chemical safety assessment is not executed.

15. Other information

Information is referenced from other manufacturers.

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 and Regulation (EC) No. 2015/830. Label element according to Regulation (EC) No 1272/2008.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.