

Material Safety Data Sheet (MSDS)

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Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Section 1: Identification of the substance/ mixture and of the company/ undertaking

1.1 Product identifier

Nylacast PA6 Natural

1.2 Details of the supplier of the safety data sheet

Company

Nylacast Engineered Products
480 Thurmaston Road
Leicester
LE4 9LN United Kingdom

Advice on SDS and technical help contact:
Health emergency & customer service:
Telephone: +44 (0)116 276 8558

Research & Development Department

Email: ResearchandDevelopment@nylacast.com

Company Registration Number: 06033691

www.nylacast.com

Section 2: Hazard identification

2.1 Classification of the substance or mixture

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

No need for classification according to GHS criteria for this product.
See section 15 for a regulatory analysis of the ingredients.

2.2 Label elements

Globally harmonized system, EU [GHS]

The product does not require a hazard warning label in accordance with GHS criteria.
See section 15 for a regulatory analysis of the ingredients.

2.2 Other hazard

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

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

The product does not require a hazard warning label in accordance with GHS criteria.
See section 15 for a regulatory analysis of the ingredients.

Section 3: Composition/ Information on ingredients

3.1 Substances

Chemical characterization: Cast Polyamide 6 (cast Nylon 6)

Description: Semi-finished product in shapes such as sheets, rods, plates, tubes and blocks.

Composition: Contains small amount of monomer Caprolactam (CAS No: 105-60-2).

Section 4: First aid measures

4.1 Description of first aid measures

Eye contact:

Particles can cause mechanical irritation. If irritation occurs, summon physician. Monomers vapor from heated product can cause irritation. Wash affected eyes for at least 15 minutes under running water with eyelids open, consult an eye specialist.

Skin contact:

Monomers vapor from heated product can cause irritation. Wash thoroughly with soap and water.

Inhalation:

Monomers vapor from heated product can cause irritation. Keep patient calm, remove to fresh air, summon medical help.

Ingestion:

If swallowed, obtain medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms

No symptoms known currently.

Hazards

No special measures necessary.

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

Treatment

Treat symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Foam, water, water spray, dry chemical, carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Incomplete combustion results in formation of toxic vapor, containing mainly carbon monoxide and carbon dioxide. In addition, small quantities of the following substances can be formed, nitrogen oxides, hydrogen cyanide.

5.3 Special protective equipment

For fires in enclosed areas, firefighters must use self-contained breathing apparatus. May generate irritating vapors when burning. Collect separately contaminated extinguishing water, do not allow to reach sewerage or effluent system.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in section 7 and 8.

6.2. Environmental precautions

Dispose in accordance with local and national regulations. Do not dispose into the drains/surface waters/ground waters. Small particles may present a physical ingestion hazard to wildlife.

6.3. Methods and material for containment and cleaning up

Sweep/shovel up. Collect dust using a suitable vacuum system. Send in suitable containers for recycling or disposal.

Section 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

When used and handled appropriately no special measures are needed. Handle heavier parts either with lifting equipment or sufficient manpower.

Hygiene measures

Wash hands before breaks and at the end of workday.

Advice on protection against fire and explosion

Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Provide suitable ventilation and dust-extraction system to minimize exposure. Use local mechanical exhaust ventilation at sources of air contamination such as processing equipment/ cutting machines. Store in a dry place away from water and high relative humidity.

7.3. Specific end use(s)

No further recommendations.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Components with occupational exposure limits

No occupational exposure limits known.

8.2. Exposure controls

Personal protective equipment

General protective measures

Wear suitable protective equipment.

Respiratory protection:

Use suitable respiratory protection equipment (NIOSH approved mask) when airborne exposure limits are reached or exceeded. practices which include wearing suitable gloves to protect from abrasion and cutting.

Hand protection:

This product does not present skin concern requiring special protection beyond normal good industrial hygiene and safety practices which include wearing suitable gloves to protect from abrasion and cutting.

Eye protection:

Eye contact with this solid product is unlikely. However, in machining areas adequate eye protection (safety goggles) should be worn to protect from small particles generated by machining.

Skin Protection:

Minimize skin contact by following good industrial hygiene and safety practices, although this product does not present significant skin concern.

Body protection:

Working clothes.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid

Appearance: Blocks, rods, tubes and sheets

Particle size: NA

Colour: White/ Cream

Odour: Odourless

Odour threshold: Not required

Melting Point: 219 - 230°C

Relative Density: 1.130 – 1.150 g/cm³ (20 °C)

Solubility in Water: Insoluble

SECTION 10: Stability and Reactivity

10.1. Reactivity

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

10.4. Conditions to avoid

Avoid excessive temperatures.

10.5. Incompatible materials

Substances to avoid:

Strong acids, strong oxidizing agents and certain salts may have detrimental effect on product. A Chemical Resistance Chart can be obtained with technical data for the material. In general, contact with solutions of pH >12 and <2 will cause deterioration of the material.

10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition occurs at temperatures above the melting temperature. Combustion products are: carbon dioxide, CO₂, carbon monoxide, CO, oxides of nitrogen, NO_x and traces of hydrogen cyanide, HCN.

SECTION 11: Toxicological Information

No data available.

SECTION 12: Ecological Information

12.1. Toxicity

No data available.

12.2. Persistence and degradability

This material (polymer) is not classified as biodegradable.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Other adverse effects

The product does not contain substances that are listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

12.7. Additional information

No data available.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Product

Dispose in accordance with local and national regulations.

The material can be recycled by extrusion process into pellets for further processing.

SECTION 14: Transport Considerations

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Hazard and Handling Notes:

Not dangerous cargo.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not classified.

SECTION 15: Regulatory Considerations

This product is compliant with:

- EU Directive 2002/95/EC on the restrictions of use of certain hazardous substances in electrical and electronic equipment, (RoHS),
- EU Directive 2002/96/EC on the restrictions of certain hazardous substances in waste electrical and electronic equipment, (WEEE),
- EU Directive 2003/11/EC on the restrictions of the use of PBB and PBDE fire retardants.

This product is considered not to have met any hazards category under the section 311 and 312 of SARA Title III (Amendment Act-USA public law 99-499, Oct.17 1986).

This product is not a controlled product under the Canadian Workplace Hazardous Materials Information System.

The product is expected to be in compliance with the inventory listing requirements of the US Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

SECTION 16: Other Information

This data is supplied in accordance with guidelines set out by the Commission of the European Communities.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.