

TECATEC PCL Flax Fibres

1. Identification of the article and of the company

Trade name:

TECATEC PCL NAFXX XYYY IP VXX natural, TECATEC PCL NAFXX XYYY OS VXX natural, TECATEC PCL NAFXX XYYY PL VXX natural

Application:

Semi-finished engineering plastics, finished parts

Note:

The present product is an article in the sense of regulation (EC) No 1907/2006 (REACH).

Supplier:

Ensinger GmbH Wilfried-Ensinger-Straße 1 D - 93413 Cham Tel. +49 9971 396 0 www.ensingerplastics.com

Competent person:

phib@ensingerplastics.com

2. Hazards identification

Classification and labelling:

The product is not classified and doesn't need any labelling.

Other hazards:

Vigorous abrasion of flax fibre products yield microscopic fibre particles. Prolonged inhalation of alveolar fibre dust may cause lung damage.

3. Composition/information on ingredients

Description:

Article based on polycaprolactone, CAS No 24980-41-4. Containing flax fibre fabric. Possibly containing additives and processing aids.

Information on ingredients:

The product doesn't contain any substance, which is supposed to be released under normal or reasonably foreseeable conditions of use.



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4. First aid measures

After inhalation:

After inhalation of product dust or thermal decomposition products, remove person from the danger zone. Fresh air, oxygen supply, apply artificial respiration if necessary. Keep quiet and warm and seek medical help.

After skin contact:

After contact with product dust wash skin with plenty of water and soap. In the event of skin reactions seek medical advice.

After eye contact:

If a foreign body (splinter, chip) enters the eye do not rub. Immobilize the eye, cover both eyes with bandages, consult an eye specialist.

Indication of any immediate medical attention and special treatment needed:

Treat symptomatically.

5. Firefighting measures

Suitable extinguishing media:

Water spray, alcohol-resistant foam, carbon dioxide, dry chemical foam.

Unsuitable extinguishing media:

Water jet.

Special hazards arising from the article:

With carbonization and incomplete combustion toxic gases develop, predominantly carbon dioxide and carbon monoxide. The development of further fission and oxidation products is dependent on the conditions of burning. Traces of other toxic substances may develop under certain conditions of burning.

When the product is burnt, fine carbon fibre particles may be produced. They may cause electrical short-circuits when contacted to electrical devices.

Advice for firefighters:

If exposed to fumes and carbonization gases during fire-fighting measures, rescue operations and cleanup wear a self-contained breathing apparatus.

The product ignites in a flame and continues to burn on removal of the source.

In an advanced state of fire, the molten polymer must be cooled with water. Water used to extinguish the fire and fire remainders must be collected and water disposed of, in accordance with local regulations.

Product Handling Information Sheet (PHIS)

Information on the safe handling of products



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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No special measures necessary.

Environmental precautions:

No special measures necessary.

Methods and material for containment and cleaning up:

Mechanical cleaning up.

Avoid dry sweeping. Use an appropriate suction device for cleaning to avoid the generation of dust.

7. Handling and storage

Precautions for safe handling:

Avoid overheating of material by improper handling. The "Ensinger machining recommendations for semi-finished engineering plastics" are to be observed.

Mechanical processing should generate as little dust as possible. A local extraction system must be installed, or else a proper ventilation of the workplace must be guaranteed.

Take measures against static discharge. Keep away from sources of ignition.

Avoid inhalation of dust/mist/vapour.

General industrial hygiene regulations are to be observed.

Wash hands before breaks and at the end of workday.

Tobacco should not be kept in the workplace.

Do not eat, drink or smoke in the workplace.

Conditions for safe storage, including any incompatibilities:

The appropriate company regulations for fire prevention are to be followed.

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8. Exposure controls/personal protection

Control parameters:

In case of mechanical processing the general limit for dust is valid.

Exposure controls:

The working area should be well ventilated.

Respiratory protection:

Wear protectiv breathing apparatus in case of dust exposure and/or insufficient ventilation. Wear dust mask filter type P3 or FFP3 (DIN EN 143/DIN EN 149).

Eye/face protection:

For mechanical operations wear safety glasses with side pieces or fully closed and tight-fitting goggles (DIN EN 166).

Hand protection/skin protection:

Skin protection should be used (barrier cream containing tanning agent). For mechanical processing of fibre reinforced products loose fitting, tight work clothes should be worn. Persons with sensitive skin should wear leather protective gloves (DIN EN 388).

9. Physical and chemical properties

Appearance: solid (semi-finished parts/plates)

Melting point/Melting range: ca. 60 °C

Relative density: ca. 1,3 g/cm³

Flash point: N/A (solid)

Explosive properties: N/A

Solubility(ies): insoluble (water, 20 °C) Odour/odour threshold: Product-specific Initial boiling point and Boiling range: N/A (solid)

Decomposition temperature: > 200 °C

Flammability (solid, gas): N/A

Vapour pressure: N/A (solid)

Partition coefficient: n-octanol/water: N/A



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10. Stability and reactivity

Chemical stability:

Product is stable. No hazardous reactions known when stored and handled according to instructions and used for its intended purpose.

Conditions to avoid:

Do not heat to a temperature above the melting or decomposition temperature.

Incompatible materials:

Acids, alkalis.

Hazardous decomposition products:

No decomposition and hazardous reactions known when handled according to instructions.

11. Toxicological information

Acute toxicity:

Increased inhalation of fine fibre dust can cause coughing, shortness of breath.

Chronic toxicity:

Natural fibres, e.g. from flax, cannot be broken down by the human body. Alveolar dusts trigger an immune reaction in the lungs. This results in increased mucus production, coughing, shortness of breath. Increased/prolonged inhalation of alveolar dusts can cause a chronic disease of the lungs (byssinosis), similar to chronic bronchitis.

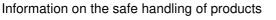
Other information:

According to the information available to us, the product does not cause any adverse health effects when handled and used properly and in compliance with the safety measures regarding dust avoidance.

12. Ecological information

No relevant information available.

Due to the consistency of the product a disperse distribution in the environment is not likely. Therefore, according to the present state of knowledge negative ecological effects are not expected.





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13. Disposal considerations

Waste treatment methods:

Product residues can be recycled or treated in an energy recovery plant. When segregated, unpolluted product residues can be recycled mechanically.

European waste cataloque:

The unpolluted product has no dangerous properties and is therefore not a hazardous waste within the meaning of regulation on the european List of wastes.

Waste codes/waste identification:

The exact assignment to a waste code must be carried out source- and use-related. Proposals for the waste code numbers based on the probable use of the unpolluted product:

07 02 13 (waste plastic)

12 01 05 (plastics shavings and turnings)

20 01 39 (plastics from separately collected fractions)

Packaging:

Uncontaminated or cleaned packaging can be recycled without verification.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

15. Regulatory informaton

Safety, health and environmental regulations/legislation specific:

According to annex II of the REACH regulation there is no legal obligation to compile safety data sheets for articles. We explicitly would like to point out that the present product handling information sheet (PHIS) is a voluntary information sheet for the handling of products, based on the same principle as our safety data sheets. Information pursuant to Article 33 of Regulation (EC) No 1907/2006 (REACH): That article doesn't contain any substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0,1 % weight by weight (w/w).

EU regulations:

According to regulation (EC) No 1272/2008 (CLP) articles are not subject to classification and labelling requirements.

Chemical safety assessment:

A chemical safety assessment is not necessary for articles and therefore has not been carried out.

National regulations:

Storage class VCI/TRGS 510 (Germany): 11 (flammable solid materials)



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16. Other information

Indication of changes:

First issue, status as of 12/22.

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values. They do not represent guaranteed properly values and therefore they must not be used for specification purposes. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. It is the user's responsibility to ensure that existing legislation and regulation are followed.