Page 1 of 5 Released 2017/09/01



18-37%

Fax: +49 (0)36739 31-666

1 - COMPANY AND PRODUCT IDENTIFICATION

Product identification: MonoPan® PP [80...120] T[N/B]

Manufacturer: MonoPan Composites GmbH & Co. KG
Address: Industrie- und Gewerbegebiet 10

Industrie- und Gewerbegebiet 10 D-07426 Königsee-Rottenbach/Thür.

Phone: +49 (0)36739 31-5 Fax: +49 (0)36739 31-666 E-Mail: <u>zentrale@monopan.de</u> Website: <u>www.monopan.de</u>

2 - COMPOSITION, INFORMATION ABOUT CONTENT

Description: • thermoplastic content

(depending on panel thickness)

thermoplastic content: 63-82%

- of which polypropylene > 80%

mineral content

(depending on panel thickness)

glass-fiber:

(E-glass)

3 - HAZARD IDENTIFICATION

Hazards identified are: Product temperatures over 232°C can lead to the release of hazardous substances.

The melted product sticks to the skin and may cause burns.

When machining the product static electricity may occur, which could lead to discharging. Thus the product needs to be grounded when cleaning with highly flammable cleaning agents.

The glass filaments are not "respirable" as their nominal diametres are larger than 9 μ m, far over the diameter of 3 μ m defined by the World Health Organisation for "respirable" fibres.

Hazards identified are:

- mechanical irritation (itching)
- the formation of respirable dusts and non-respirable filaments
- · extremely rare possibilities of allergic reactions.

Phone: +49 (0)36739 31-5

Internet: www.monopan.de

E-mail: zentrale@monopan.de

Under normal environmental conditions no combustible gases are generated.

Fire and explosion:

Page 2 of 5 Released 2017/09/01



4 - FIRST AID

General information: Under normal environmental conditions no combustible

gases are released.

Product temperatures over 232°C can lead to the release of

hazardous substances.

INHALATION: Remove from the scene of exposure to fresh air.

In case of severe inhalation of smoke, remove the victim from the hazardous area, using suitable respirators. Consult

a doctor if necessary.

SKIN CONTACT: Wash copiously with lukewarm soapy water without rubbing

excessively.

In case of contact with melted product, cool with cold water as soon as possible. Do not try to remove the solidified pro-

duct from the skin. Contact a doctor immediately.

EYE CONTACT: Flush in running water (for at least 10 minutes) and consult

medical assistance if necessary.

ALLERGIC REACTIONS: Remove from the scene of exposure.

5 - FIRE FIGHTING

Recommended extinguishing media: water or chemical powder

Explicit hazard: Combustion gases are basically carbon dioxide and water

vapour. There may be small quantities of carbon monoxide, oxides of sulphur, aldehydes, reactive hydrocarbons and phosphorous compounds in small quantities, which make it necessary to use protective equipment in the event of a

major fire.

Special measures: Protective fire fighting equipment necessary.

6 - ACCIDENTAL SPILLAGE

Personal protection: See chapter 8.

Environmental protection: The product can therefore be considered as inert industrial

waste, or even common industrial wastes, as defined by national and local regulations. All waste and scrap material should be disposed of in accordance with applicable, na-

Fax: +49 (0)36739 31-666

tional, federal, state and local regulations.

Cleaning: Vacuum clean, sweep or shovel into containers waste (if

available selective collection for recycling).

Phone: +49 (0)36739 31-5

Internet: www.monopan.de

E-mail: zentrale@monopan.de

Page 3 of 5 Released 2017/09/01



7 - HANDLING AND STORAGE

Handling: - wear gloves, and garments with sleeves

- be aware of sharp edges

- avoid prolonged contact with the skin

- clean work garment preferably with vacuum cleaner over

compressed air.

- ground the product when cleaning with highly flammable

cleaning agents.

Storage: Storage conditions:

+15 to +35°C, at 35-55% relative humidity

- no open fire

- protect from direct sunlight

- use electrically secure machinery with ground

- dry storage

- protect from incompatible materials, see chapter 10.

8 - EXPOSURE CONTROL - PERSONAL PROTECTION

General protection and hygiene: Do not eat or drink when machining the product.

Use appropriate means to reduce saw dust and/or fumes. Try to reduce the concentration of fibres likely to cause irritation. Based on the irritation character of fibres it is

recommended to use:

- gloves and garments with sleeves and long leggings

- respirator and protective goggles in case of increased concentration of dust.

Furthermore respect the parameters/limit values for inert

dusts.

Personal protection: - Respirators: in exceptional cases, like increase concentra-

tions of dust.

- skin protection: use gloves, garments with sleeves and long leggings, protective cream for persons with sensitive

skin

9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state: solid

Form/Colour: Panel, natural colour or black (pure polymer colour), with

embedded endless glass fibres

 $\begin{array}{lll} \mbox{Odour:} & \mbox{none} \\ \mbox{Melting point:} & 160^{\circ}\mbox{C} \\ \mbox{Flame point:} & > 320^{\circ}\mbox{C} \\ \mbox{Decomposition temperature:} & > 300^{\circ}\mbox{C} \\ \mbox{Flash temperature:} & > 350^{\circ}\mbox{C} \\ \end{array}$

Area weight: approximately 2,5 to 7 kg/m²

Solubility in Water: very low



Phone: +49 (0)36739 31-5 Fax: +49 (0)36739 31-666

Internet: www.monopan.de E-mail: zentrale@monopan.de

Page 4 of 5 Released 2017/09/01



10 - STABILITY AND REACTIVITY

Stability: The product is under normal conditions chemically stable.

Hazardous reactions: No hazardous reactions are known

Decomposition products: In conditions of a sustained fire, as well as water vapour and

CO₂, it is possible to generate small quantities of carbon monoxide, oxides of sulphur, aldehydes, reactive hydrocarbons and low concentrations of phosphorous compounds.

Avoidable conditions: Contact with fluor, concentrated acid and alkaline media.

11 - TOXICOLOGICAL INFORMATION

Acute Toxicity: not relevant

Localised effects: possible temporary irritations (see chapter 3)

Sensitisation: in rare cases allergic reaction

Remarks to toxicity: According our experience and best knowledge, the product

does not cause any hazard to health, when worked in an

appropriate fashion.

12 - ECOTOXICOLOGICAL INFORMATION

Ecotoxicological properties: the product is not toxic..

The polymers, by virtue of their molecular weight and their

nature, are without any ecotoxicological effects.

General information: The product floats on water.

The product is not biodegradable.

13 - WASTE DISPOSAL

Recommendation: The product should be shredded and recycled by an ap-

proved recycling company.

Disposal: Product waste can be disposed of as inert waste or as com-

mon industrial waste, depending on local regulations.

Phone: +49 (0)36739 31-5

Internet: www.monopan.de

E-mail: zentrale@monopan.de

Packaging: Clean cardboard, wood, plastic (film or bags) and packaging

can be eliminated in units specific to these products (i.e. for

Fax: +49 (0)36739 31-666

recycling or use as fuels).

14 - TRANSPORT

International regulations: The product is not considered as hazardous goods by trans-

port regulations.

Page 5 of 5 Released 2017/09/01



15 - REGULATORY INFORMATION

Identification:
National regulations:
Other regulations, limitations and prohibitions:

The product does not have to be listed according EC-regulations:

16 – OTHER INFORMATION

This Technical Safety Sheet is in addition to the Product Specification file and other technical documents issued by MonoPan[®] Composites but does not replace them. The information given by this document is based on the best knowledge at the date shown. It is given in good faith. Furthermore, users attention is drawn to the possible risks run when the product is used for any purpose other than the one for which it was designed.

This Technical Safety Sheet does not exempt users from knowing and applying the rules regulating their activities. Users assume full responsibility for applying the appropriate safety measures when the product is used.

Phone: +49 (0)36739 31-5

Internet: www.monopan.de

E-mail: zentrale@monopan.de

Fax: +49 (0)36739 31-666