

1. Burn behaviour of MonoPan®, unpainted

The burn behaviour of MonoPan® originates mainly from the polypropylene material content. Hence the classification "normal flammability" is the best achievable without the use of flame retardants. Therefore MonoPan is classified as "normally flammable" **B2** or in some cases B3 "easily flammable" **according to DIN 4102**.

Procedure: Burn rate test according to DIN 4102 – B2
Test result: „The component 20-MonoPan® PP80 TN 0.7, panel thickness 20 mm, fulfils the requirements of DIN 4102 – B2.“
Test class: B2
Laboratory: Ostthüringische Materialprüfungsgesellschaft für Textil und Kunststoffe mbH
(DAR – accreditation, Reg.-Nr. DAP-P-01,397-00-97-01)

2. General test of plastics, Standard Paint

Testing of the burn behaviour of MonoPan® with standard paint (12.12.2002)
A standard painted MonoPan® meets the criteria of not easily flammable materials, material class F1 according to DIN 53438-T3.

Procedure: Flaming of surface with burner according to DIN 53438-T3
Test result: „The tip of the flame from the burning specimen does not reach the gauge mark (the test specimen is self extinguishing before reaching the mark).“
Test class: F1
Laboratory: Ostthüringische Materialprüfungsgesellschaft für Textil und Kunststoffe mbH
(DAR – accreditation, Reg.-Nr. DAP-P-01,397-00-97-01)

3. Classification of building materials, special coating

Testing of the burn behaviour of MonoPan® with flame retardant paint (spray paint) (12.12.2002)
MonoPan® with special coating meets the material class **B1 according to DIN 4102-1** "Fire behaviour of building materials and elements" (May 1998), chapters 6.1.2.3 and 6.2.2.

Procedure: DIN 4102-14 (May 1990)
Test class: Material Class B1
Laboratory: MPA NRW Materialprüfungsamt Nordrhein – Westfalen
Certificate: Nr. 230002835, July 26th 2002.

Paint: Coating	Designation	Quantity, wet
1	Peter Lacke PEHAFIX PP-primer P 71975 (tested: precursor with the laboratory designation VPAA06093, see certificate)	20-50 g/m ²
2	Peter Lacke PEHAPOL 2K-filler P 81914 with Peter Lacke PEHAPOL hardener P 85045	ca. 90 g/m ² (incl. hardener)
3	Nullifire PP2000	ca. 300 g/m ²
4	Tremco Cartoline 134	ca. 70 g/m ²

Coating: The pre-coating of layer 1 and 2 may be done by WIHAG in an online-process or by spray paint.
The solvent based paints 3 and 4 may be sprayed in one coating procedure, respectively (airless).

The Nullifire PP2000 paint is an intumescent coating, which is activated below 165°C. The flame retardant effect is achieved by the creation of an insulating non-flammable carbon foam and by energy dissipation from the flame.

For applications, treatment and storage please pay attention to the „Technical Data Sheet“ of the manufacturer.

The specifications in this data sheet represent the current state of our technical knowledge and its purpose is to inform about MonoPan® and its applications. The specifications therefore do not guarantee particular properties or suitability for a specific application. We reserve the right to make changes in accordance with technological processes and other developments. We guarantee faultless quality in accordance with our conditions of sale.