

AKROMID®

C28 GF 25 FRT grey (8331)

PA-Blend

AKROMID® C28 GF 25 FRT grey (8331) is a 25 % glass fiber reinforced, flame retardant and easy flowing PA blend, colored in grey similar to NCS S 3000 N. The material is based on a flame retardant system that is free of red phosphorus and halogens. This grade is suitable for railroad applications and certified to EN 45545-2 R6 and EN 45545-2 R1. To achieve an excellent surface quality a mould temperature of at least 120°C is necessary.

Features

flame retardant surface modified easy flow

public transportation

Regulatory

EN45545-2

Properties

Modulus

10.800 MPa

Strength

140 MPa

Impact

47 kJ/m²

Mechanical Properties

Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

10800 MPa

Tensile stress at break

ISO 527-2

5 mm/min | d.a.m.

140 MPa

Tensile strain at break

ISO 527-2

5 mm/min | d.a.m.

2,0 %

Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

47 kJ/m²

Thermal Properties

Melting temperature

ISO 11357-3

DSC, 10K/min

238 °C

Coefficient of linear thermal expansion

ISO 11359-1/2

23°C to 80°C | parallel

0,2 10⁻⁴/K

23°C to 80°C | transverse

0,66 10⁻⁴/K

Flammability

Flammability UL 94	0,4 mm Wall thickness	V-0 Class
	0,8 mm Wall thickness	V-0 Class
	1,6 mm Wall thickness	V-0 Class
	3,2 mm Wall thickness	V-0 Class
Burning rate 5V UL 94	1,6 mm Wall thickness	5VA Class
	3,2 mm Wall thickness	5VA Class
GWFI IEC 60695-2-12	0,4 mm Wall thickness	960 °C
	0,8 mm Wall thickness	960 °C
	1,6 mm Wall thickness	960 °C
	3,2 mm Wall thickness	960 °C
GWIT IEC 60695-2-13	0,4 mm Wall thickness	825 °C
	0,8 mm Wall thickness	800 °C
	1,6 mm Wall thickness	800 °C
	3,2 mm Wall thickness	850 °C
Burning rate (<100 mm/min) FMVSS 302	> 1 mm Thickness	+
Protection Train EN 45545-2		R1/6/7 HL2

General Properties

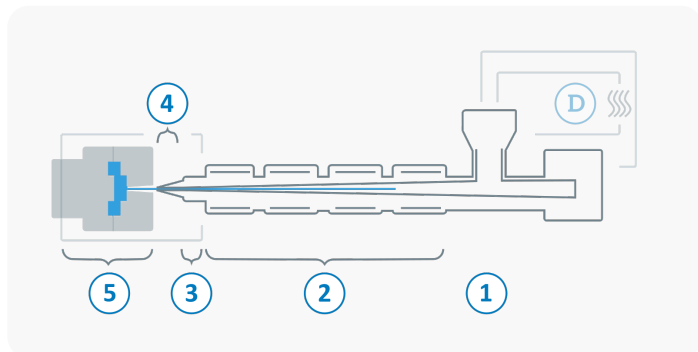
Density ISO 1183	23°C	1,44 g/cm³
Humidity absorption ISO 1110	70°C, 62% r.H.	0,9 - 1,1 %
Molding shrinkage ISO 294-4	flow	< 0,2 %
	transverse	0,1 - 0,3 %

Electrical Properties

Comparative tracking index IEC 60112	Test liquid A	600 V
--	---------------	--------------

Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	Drying time	4 - 12 h
	Drying temperature ($\tau \leq -30^{\circ}\text{C}$)	80 - 90 °C
	Processing moisture	0,02 - 0,1 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	250 - 300 °C
3	Nozzle temperature	270 - 300 °C
4	Melt temperature	270 - 300 °C
5	Mold temperature	120 - 160 °C
→	Holding pressure, spec.	300 - 1500 bar
←	Back pressure, spec.	50 -150 bar
	Injection speed	high
	Screw speed	8 - 10 m/min

Diagrams

