

# AKROTEK® PRELIMINARY

## PK-VM GF 30 8 HU natural (8895)

PK GF30

AKROTEK® PK-VM GF 30 8 HU natural (8895) is a 30% glass fibre reinforced polyketone with high stiffness and strength. PK is characterized by its outstanding media resistance, which qualifies it to be used for components that are in contact with chemicals. The material corresponds to the European food guideline EU 10/2011 and to the American FDA 21 CFR. This grade is suitable for parts of kitchen and household appliances. This compound is listed at UL94 HB all colors.

### Regulatory



### Properties

Modulus

8.400 MPa

Strength

140 MPa

Impact

70 kJ/m<sup>2</sup>

## Mechanical Properties

### Tensile modulus

ISO 527-2

1 mm/min | d.a.m.

8400 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.

2,5 %

### Charpy impact strength

ISO 179-1/1eU

23°C | d.a.m.

70 kJ/m<sup>2</sup>

## Thermal Properties

### Melting temperature

ISO 11357-3

DSC, 10K/min

220 °C

## Flammability

## Flammability

UL 94

**UL** 0,8 mm Wall thickness

**HB Class**

**UL** 1,6 mm Wall thickness

**HB Class**

**UL** 3,2 mm Wall thickness

**HB Class**

## General Properties

### Density

ISO 1183

23°C

**1,48 g/cm<sup>3</sup>**

### Humidity absorption

ISO 1110

70°C, 62% r.H.

**0,6 - 0,7 %**

### Water absorption

ISO 62

23°C, saturated

**0,6 - 0,7 %**

### Molding shrinkage

ISO 294-4

flow

**0,3 - 0,5 %**

transverse

**0,8 - 1,0 %**

## Electrical Properties

### Comparative tracking index

IEC 60112

**UL** Test liquid A

**600 V**

### Comparative tracking index

ASTM D3638

**UL**

**0 PLC**

## 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.



<b>D</b>	Drying time	0 - 4 h
	Drying temperature ( $\tau \leq -30^{\circ}\text{C}$ )	80 °C
	Processing moisture	0,02 - 0,1 %
<b>1</b>	Feed section	60 - 80 °C
<b>2</b>	Temperature Zone 1 - Zone 4	220 - 260 °C
<b>3</b>	Nozzle temperature	230 - 260 °C
<b>4</b>	Melt temperature	230 - 260 °C
<b>5</b>	Mold temperature	60 - 120 °C
<b>→</b>	Holding pressure, spec.	300 - 800 bar
<b>←</b>	Back pressure, spec.	30 - 70 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min