

# Technical data KEBAFLOW LCP MX130

KEBAFLOW LCP MX130 is a 30% short glass fiber/mineral blend reinforced LCP with very high heat deflection temperature. The material is characterized by the following properties: Good flowability at thin wall thicknesses, very good toughness and strength, inherently flame retardant, high heat deflection temperature (HDT  $\sim$ 270°C), good chemical resistance.

Polymer: LCP

ISO designation: LCP-GFMD30

**Productgroup:** LCP

#### **Brief description of the product family:**

The trade name KEBAFLOW stands for a range of liquid crystalline polymers (LCP). KEBAFLOW's outstanding flowability enables the realization of extremely thin wall thicknesses. KEBAFLOW LCP is inherently flame retardant and exhibits very high heat resistance and good aging behavior.

#### **Properties:**

dimensionally stable, Thin wall thicknesses, good aging behavior, good fire behavior, high continuous used temperature, semi-crystalline

## Typical areas of application:

Pressure cans, LED housing, Luminaire housing, Relay, Bobbin, Plug

# Industries:

Automotive, Electrical and electronics industry, Household appliances, Aviation Industry, Mechanical Engineering

Physical properties	
Water absorption in %   in Anlehnung an ISO 62	0.03
Density in kg/m³   ISO 1183-1	1670.00

Mechanical properties	
E-modulus in MPa   ISO 527-1	12000
Breaking stress in MPa   ISO 527-1	125.0
Elongation at break in %   ISO 527-1	2.3

Rheological properties	
Shrinkage in flow direction in %   ISO 294-4	0.15
Shrinkage transverse to the flow direction in %   ISO 294-4	0.42

Thermal properties	
Heat deflection temperature HDT (1.80 MPa) in °C   ISO 75-1/-2	268.0
Fire behavior (0.8 mm wall thickness)   IEC 60695-11-10	VO

Electrical properties	
Contact resistance in Ohm*m   IEC 60093	1e+13
Surface resistivity in ohms   IEC 60093	1e+15

## **Processing instructions:**

## **Pre-drying:**

Dryer type: dry air dryer. Temperature: 150 - 170°C

Drying time: 4-6 h

Residual moisture: < 0.01%.

## **Temperatures:**

Melt temperature: 335 - 345°C Mold temperature: 80 - 120°C

# Dosage:

Shot volume = 50-80% of the maximum metering volume.

Back pressure: very low (0 - 30 bar spec.)

Dosing time: Corresponds approx. to cooling time

## Injection unit:

Screw: 3-zone screw with non-return valve

Nozzle: Open nozzle or shut-off nozzle (recommended)

Wear protection: Wear and corrosion protected according to the machine manufacturer's recommendation for

LCP glass fiber reinforced

#### The most important processing instructions in brief:

- Ensure good drying! Ensure moisture content < 0.01%.
- Inject as fast as possible, if necessary use machine with pressure accumulator.
- Injection speed has a strong influence on the achievable flow path length
- Avoid excessively thick walls
- Ensure good venting

## **Legal notices:**

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