Celanese
The chemistry inside innovation™

VECTRA® J543 VD3071 COSMOS BLACK

Liquid Crystal Polymer

40% Mineral filled, high heat resistance. Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant

Product information

Resin Identification	LCP-MD41	ISO 1043
Part Marking Code	>LCP-MD41<	ISO 11469

Typical mechanical properties

Tensile modulus	9000	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	105	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	3.3	%	ISO 527-1/-2
Flexural modulus	10000	MPa	ISO 178
Flexural strength	120	MPa	ISO 178
Izod notched impact strength, 23°C	5	kJ/m²	ISO 180/1A
Poisson's ratio	0.34[C]		

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	350	°C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	240	°C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	283	°C	ISO 75-1/-2

Physical/Other properties

Density	1740	kg/m³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	150	°C
Drying Time, Dehumidified Dryer	4 - 6	h
Processing Moisture Content	≤0.01	%
Melt Temperature Optimum	355	°C
Min. melt temperature	345	°C
Max. melt temperature	370	°C
Screw tangential speed	0.2 - 0.3	m/s
Mold Temperature Optimum	100	°C
Min. mould temperature	80	°C
Max. mould temperature	140	°C
Ejection temperature	315	°C

Characteristics

Processing	Injection Moulding
Additives	Mineral Filler
Special characteristics	Flame retardant, Heat stabilised or stable to heat, Specialty appearance, High Flow, Lead-free soldering resistant

Celanese
The chemistry inside innovation™

VECTRA® J543 VD3071 COSMOS BLACK

Liquid Crystal Polymer

Additional information

Processing Notes

Pre-Drying

VECTRA should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be =< - 40° C. The time between drying and processing should be as short as possible.