

VECTRA® DEV SLX543 VL4146 BRASS - LCP

Experimental Grade. Please contact your Celanese representative for further information.

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	12570.3	MPa	ISO 527-2/1A
Tensile stress at break, 5mm/min	154	MPa	ISO 527-2/1A
Tensile strain at break, 5mm/min	2.7	%	ISO 527-2/1A
Flexural modulus, 23°C	12900	MPa	ISO 178
Flexural strength, 23°C	162	MPa	ISO 178
Flexural strain at break	3.4	%	ISO 178
Charpy impact strength, 23°C	51.9	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	25.8	kJ/m ²	ISO 179/1eA

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10°C/min	337	°C	ISO 11357-1/-3
DTUL at 1.8 MPa	237	°C	ISO 75-1, -2

Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0.01	%	-
Drying time	4 - 6	h	-
Drying temperature	170	°C	-
Temperature	Value	Unit	Test Standard
Hopper temperature	20 - 30	°C	-
Feeding zone temperature	60 - 80	°C	-
Zone1 temperature	315 - 325	°C	-
Zone2 temperature	320 - 330	°C	-
Zone3 temperature	325 - 335	°C	-
Zone4 temperature	330 - 340	°C	-
Nozzle temperature	335 - 345	°C	-
Melt temperature	335 - 345	°C	-
Mold temperature	80 - 120	°C	-
Hot runner temperature	335 - 345	°C	-
Pressure	Value	Unit	Test Standard
Injection pressure	500 - 1500	bar	-
Hold pressure	500 - 1500	bar	-
Back pressure max.	30	bar	-
Speed	Value	Unit	Test Standard
Injection speed	very fast	-	-
Screw Speed	Value	Unit	Test Standard
Screw speed diameter, 16mm	200	RPM	-
Screw speed diameter, 25mm	140	RPM	-
Screw speed diameter, 40mm	80	RPM	-