

VECTRA® S625 - LCP

Description

Low friction and wear resistance. Chemical abbreviation according to ISO 1043-1 : LCP Inherently flame retardant.

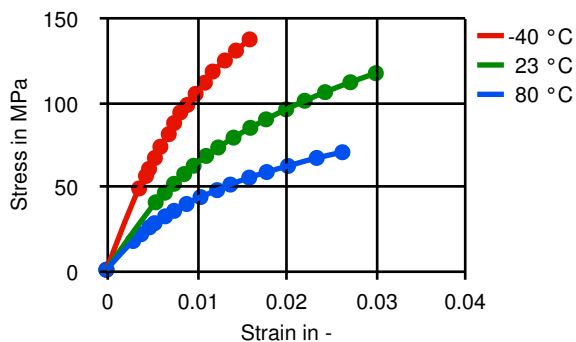
Physical properties	Value	Unit	Test Standard
Density	1530	kg/m ³	ISO 1183
Molding shrinkage, parallel	0	%	ISO 294-4, 2577
Molding shrinkage, normal	0,8	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
Tensile modulus	8300	MPa	ISO 527-2/1A
Tensile stress at break, 50mm/min	121	MPa	ISO 527-2/1A
Tensile strain at break, 50mm/min	3	%	ISO 527-2/1A
Flexural modulus, 23 °C	9500	MPa	ISO 178
Flexural strength, 23 °C	152	MPa	ISO 178
Izod impact notched, 23 °C	4	kJ/m ²	ISO 180/1A
Izod impact unnotched, 23 °C	25	kJ/m ²	ISO 180/1U

Thermal properties	Value	Unit	Test Standard
Melting temperature, 10 °C/min	350	°C	ISO 11357-1/-3
DTUL at 1.8 MPa	271	°C	ISO 75-1, -2
DTUL at 8.0 MPa	129	°C	ISO 75-1, -2
Vicat softening temperature, 50 °C/h 50N	227	°C	ISO 306
Thermal conductivity, flow	3,49	W/(m K)	ASTM E 1461
Thermal conductivity, crossflow	2,11	W/(m K)	ASTM E 1461
Thermal conductivity, thruplane	0,63	W/(m K)	ASTM E 1461
Specific heat	1270	J/(kg K)	ASTM E 1461

Diagrams

True Stress-strain



Typical injection moulding processing conditions

Pre Drying	Value	Unit	Test Standard
Necessary low maximum residual moisture content	0,01	%	-
Drying time	6	h	-
Drying temperature	150	°C	-
Temperature	Value	Unit	Test Standard
Hopper temperature	20 - 40	°C	-
Feeding zone temperature	60 - 80	°C	-
Zone1 temperature	345 - 355	°C	-
Zone2 temperature	355 - 365	°C	-
Zone3 temperature	365 - 375	°C	-
Zone4 temperature	365 - 375	°C	-
Nozzle temperature	365 - 375	°C	-
Melt temperature	365 - 375	°C	-
Mold temperature	80 - 140	°C	-

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Hot runner temperature	365 - 375	°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	-	-

Other text information

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 $\leq -40^{\circ}\text{C}$. The time between drying and processing should be as short as possible.

Characteristics

Product Categories

Specialty

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