

VECTRA® E830iPd | LCP | Specialty

Description

30% glass filled Platable grade.

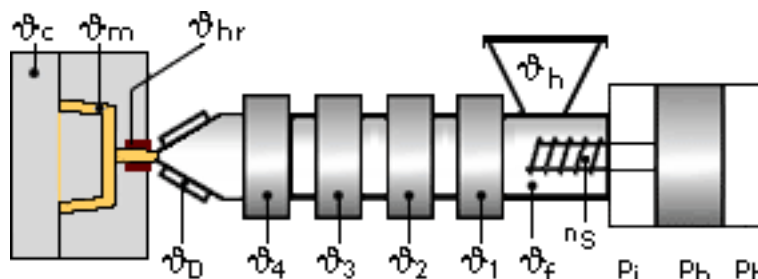
Chemical abbreviation according to ISO 1043-1 : LCP
Inherently flame retardant.

FDA compliant.

Mechanical properties	Value	Unit	Test Standard
Tensile modulus (1mm/min)	14000	MPa	ISO 527-2/1A
Tensile stress at break (5mm/min)	140	MPa	ISO 527-2/1A
Tensile strain at break (5mm/min)	3	%	ISO 527-2/1A
Flexural modulus (23°C)	13000	MPa	ISO 178
Flexural strength (23°C)	170	MPa	ISO 178

Thermal properties	Value	Unit	Test Standard
Melting temperature (10°C/min)	335	°C	ISO 11357-1,-2,-3
DTUL @ 1.8 MPa	245	°C	ISO 75-1/-2

Typical injection moulding processing conditions



Pre Drying:

Necessary low maximum residual moisture content: 0.01%

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.

Drying time: 6 h

Drying temperature: 150 - 150 °C

Temperature:

	$\vartheta_{\text{Manifold}}$	ϑ_{Mold}	ϑ_{Melt}	$\vartheta_{\text{Nozzle}}$	ϑ_{Zone4}	ϑ_{Zone3}	ϑ_{Zone2}	ϑ_{Zone1}	ϑ_{Feed}	$\vartheta_{\text{Hopper}}$
min (°C)	340	80	340	340	335	325	320	315	60	20
max (°C)	350	120	350	350	345	335	330	325	80	30

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Pressure:

	Inj press	Hold press
min (bar)	500	500
max (bar)	1500	1500

Speed:

Injection speed: medium

Screw speed

Screw diameter (mm)	16	25	40	55	75
Screw speed (RPM)	200	140	80	-	-

Special Info:

For MID applications mold temperature between 120 - 140°C are recommended. For applications with extremely thin wall applications pre-humidity of max. 0,01% is recommended. When using short metering strokes an accumulator is recommended to get short injec

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General Disclaimer

NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. These values alone do not represent a sufficient basis for any part design and are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Colorants or other additives may cause significant variations in data values.

Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use.

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We strongly recommend that users seek and adhere to the manufacturer's current instructions for handling each material they use, and entrust the handling of such material to adequately trained personnel only. Please call the telephone numbers listed (+49 (0) 69 30516299 for Europe and +1 859-372-3244 for the Americas) for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process our products.

The products mentioned herein are not intended for use in medical or dental implants.

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