

VECTRA® S471 | LCP | Mineral / Glass Reinforced

Description

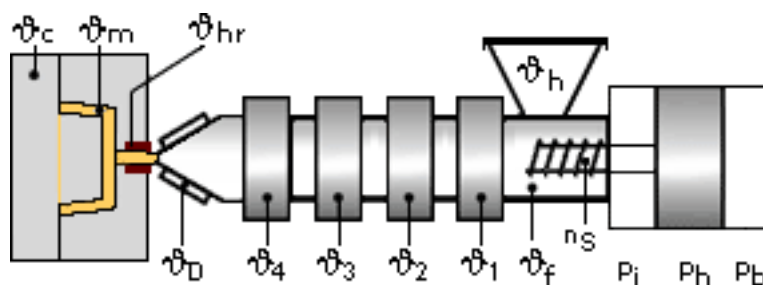
High flow, High Heat resistance, Low Warpage, for Thick Walled (>0.2mm) or thin (<0.2mm) & Thick Walled combination parts.

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

UL-Listing V-0 in natural and black at 0.4mm thickness per UL 94 flame testing.
Relative-Temperature-Index (RTI) according to UL 746B: electricals 130°C, mechanicals 130°C.

UL = Underwriters Laboratories (USA)

Typical injection moulding processing conditions



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.

For subsequent storage of the material in the dryer until processed the temperature does not need to be lowered for grades A, B, C, D and V ($\leq 24\text{ h}$).

Drying time: 6 h

Drying temperature: 302 - 338 °F

Temperature:

	θ_{Manifold}	θ_{Mold}	θ_{Melt}	θ_{Nozzle}	θ_{Zone4}	θ_{Zone3}	θ_{Zone2}	θ_{Zone1}	θ_{Feed}	θ_{Hopper}
min (°F)	671	176	680	671	671	653	644	626	140	68
max (°F)	698	248	707	698	698	689	680	662	176	104

Pressure:

	Inj press	Hold press	Back pressure
min (psi)	7250	7250	0
max (psi)	21800	21800	435

Speed:

Injection speed: medium

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Injection Molding

A three-zone screw evenly divided into feed, compression, and metering zones is preferred. A higher percentage of feed flights may be needed for smaller machines: ½ feed, ¼ compression, ¼ metering.

Vectra LCPs are shear thinning, their melt viscosity decreases quickly as shear rate increases. For parts that are difficult to fill, the molder can increase the injection velocity to improve melt flow.

Contact Information

Americas

8040 Dixie Highway, Florence, KY 41042 USA

Product Information Service

t: +1-800-833-4882 t: +1-859-372-3244

Customer Service

t: +1-800-526-4960 t: +1-859-372-3214

e: info-engineeredmaterials-am@celanese.com

Asia

4560 Jinke Road, Zhang Jiang Hi Tech Park

Shanghai 201203 PRC

Customer Service

t: +86 21 3861 9266 f: +86 21 3861 9599

e: info-engineeredmaterials-asia@celanese.com

Europa

Am Unisys-Park 1, 65843 Sulzbach, Germany

Product Information Service

t: +(00)-800-86427-531 t: +49-(0)-69-45009-1011

e: info-engineeredmaterials-eu@celanese.co

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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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