

PC 1621-02

Description

It is designed for Water Bottle blow molding with high impact strength and special processing property.

Application

Compound, Water Bottle

Key Features

Good Mold Release, High Impact Resistance, High Transparency

Properties	Method	Unit	PC 1621-02
Physical			
Melt Flow Rate (300 °C /1.2 kg)	ASTM D1238	g/10min	2.5
Density	ASTM D792	kg/m ³	1200
Mold Shrinkage	ASTM D955	mm/mm	0.005~0.007
Water Absorption @ 24 hrs, 23°C	ASTM D570	%	0.15
Water Absorption @ equilibrium, 50%RH, 23°C	ASTM D570	%	0.32
Optical			
Refractive Index, nD	ASTM D542		1.586
Light Transmittance	ASTM D1003	%	89
Haze	ASTM D1003	%	0.7~1.5
Thermal			
Deflection Temperature Under Load (DTUL) @ 4 mm 66 psi (0.45 MPa), annealed	ASTM D648	°C	142
Deflection Temperature Under Load (DTUL) @ 4 mm 264 psi (1.8 MPa), annealed	ASTM D648	°C	128
Deflection Temperature Under Load (DTUL) @ 4 mm 264 psi (1.8 MPa), unannealed	ASTM D648	°C	137
Vicat Softening Point, 50°C /hr, 50N Load	ASTM D1525	°C	146
Coefficient of Linear Thermal Expansion, @ -40 to 82°C	ASTM D696	mm/mm/°C	68 x 10 ⁻⁶
Mechanical			
Tensile Yield Strength	ASTM D638	MPa	63
Ultimate Tensile Strength	ASTM D638	MPa	60
Elongation at Yield	ASTM D638	%	6
Elongation at Break	ASTM D638	%	90
Tensile Modulus	ASTM D638	MPa	2275
Flexural Strength	ASTM D790	MPa	96
Flexural Modulus	ASTM D790	MPa	2406
Notched Izod Impact @ 23 °C	ASTM D256	J/m	927
Unnotched Izod Impact @ 23 °C	ASTM D256		No break

Note

- When used unmodified for the manufacture of food contact articles LUPOY 1621-2 Polycarbonate resins comply with the U.S. Food, Drug, and Cosmetic Act and Food Additive Regulations 21 CFR 177.1580 and E.U. Food Contact Regulations.
- Typical properties; not to be constructed as specifications.
- 0.125 in; 10 mil notch (3.2 mm; 0.25 mm notch).
- These numerical flame spread rating are small-scale test values and are not intended to reflect hazards presented by these or any other materials under actual fire conditions.

※ Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molded specimens and after 48 hours storage at 23°C, 50% relative humidity.

Issued Date : 2022-02-14

The information contained herein, including, but not limited to, data, statements and typical values, are given in good faith. LG Chem makes no warranty or guarantee, expressed or implied, (i) that the result described herein will be obtained under end - use conditions, or (ii) as to the effectiveness or safety of any design incorporating LG Chem materials, products, recommendations or advice. Further, any information contained herein shall not be construed as a part of legally binding offer. Especially, the typical values should be regarded as reference values only and not as binding minimum values. Each user bear full responsibility for making its own determination as to the suitability of LG Chem's materials, products, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating LG Chem material or products will be safe and suitable for use under end - use conditions. The data contained herein can be changed without notice as a result of the quality improvement of the products.