



Distrupol

A Univar company

Durolon® VR-2200

Unigel Plásticos - Polycarbonate

Tuesday, November 06, 2007

General Information

Product Description

Injection molding polycarbonate.
Medium flow rate product with enhanced mold release performance.
For applications that requires enhanced UV resistance.

General

Material Status	• Commercial: Active
Availability	<ul style="list-style-type: none"> • Sweden • Portugal • Norway • Latvia • Lithuania • Ireland • United Kingdom • Finland • Spain • Estonia • Denmark • Benelux
Test Standards Available	<ul style="list-style-type: none"> • ASTM • ISO
Additive	<ul style="list-style-type: none"> • Mold Release • UV Stabilizer
Features	<ul style="list-style-type: none"> • Clarity, High • Mold Release, Good • UV Resistance, Good • Viscosity, Medium
Appearance	<ul style="list-style-type: none"> • Clear • Colors Available
Forms	<ul style="list-style-type: none"> • Pellets
Processing Method	<ul style="list-style-type: none"> • Injection Molding

ASTM and ISO Properties ¹

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.20 g/cm ³	ASTM D792
Density	1.20 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12 g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12 g/10 min	ISO 1133
Mold Shrink, Linear-Flow	0.0050 to 0.0070 cm/cm	ASTM D955
Water Absorption @ 24 hrs (23 °C)	0.23 %	ASTM D570
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2300 MPa	ASTM D638
Tensile Modulus	2300 MPa	ISO 527-1, -2
Tensile Strength @ Yield	68.0 MPa	ASTM D638
Tensile Stress at Yield	68.0 MPa	ISO 527-1, -2
Tensile Strength @ Break	73.0 MPa	ASTM D638
Tensile Stress at Break	73.0 MPa	ISO 527-1, -2
Tensile Elongation @ Brk	100 %	ASTM D638
Tensile Strain at Break	100 %	ISO 527-1, -2
Flexural Modulus	2350 MPa	ASTM D790
Flexural Modulus	2350 MPa	ISO 178
Flexural Strength	95.0 MPa	ASTM D790
Flexural Strength	95.0 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Notched Izod Impact (3.20 mm)	830 J/m	ASTM D256



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Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale) (R-Scale)	75 120	ASTM D785
Thermal	Nominal Value Unit	Test Method
DTUL @264psi - Unannealed	132 °C	ASTM D648
HDT A (1.80 MPa) Unannealed	132 °C	ISO 75A-1, -2
CLTE, Flow	0.000065 cm/cm/°C	ASTM D696
Electrical	Nominal Value Unit	Test Method
Volume Resistivity	1.0E+16 ohm-cm	ASTM D257
Dielectric Strength (1.60 mm)	29.0 kV/mm	ASTM D149
Dielectric Constant (60 Hz) (1E+6 Hz)	2.910 2.850	ASTM D150
Dissipation Factor (60 Hz) (1E+6 Hz)	0.00066 0.0092	ASTM D150
Arc Resistance	110 sec	ASTM D495
Flammability	Nominal Value Unit	Test Method
Flame Rating - UL (3.00 mm)	HB	UL 94
Glow Wire Ignition Temperature (3.20 mm)	960 °C	IEC 60695-2-13
UL File Number	E102385	
Optical	Nominal Value Unit	Test Method
Refractive Index	1.586	ASTM D542
Refractive Index	1.586	ISO 489
Transmittance	89.0 %	ASTM D1003

Additional Properties
Volume Resistivity, ASTM D257: >1E16 ohm-cm
Arc Resistance, ASTM D495: 100 to 120 sec

Processing Information

Injection	Nominal Value Unit
Drying Temperature	120 °C
Drying Time	4.0 hr
Rear Temperature	260 °C
Middle Temperature	270 °C
Front Temperature	280 °C
Nozzle Temperature	270 °C
Processing (Melt) Temp	240 to 300 °C
Mold Temperature	80.0 to 100 °C

Notes

¹ Typical properties: these are not to be construed as specifications.



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