

Technical Data Sheet

DuPure[®] R 50

Polypropylene Homopolymer

Description

DuPure R 50 is a polypropylene homopolymer (produced with a phthalate-free catalyst) with a narrow/medium molecular weight distribution, and is formulated with a general purpose additivition package. The product shows a good flowability.

Applications

DuPure R 50 is suitable for: general purpose injection moulding, e.g. closures, furniture and house ware.

Properties		Method	Typical Value*	Unit
Physical				
Melt Flow Rate	(230 °C / 2.16 kg)	ISO 1133	12	g/10 min
Mechanical				
Tensile Modulus	(1 mm/min)	ISO 527-2	1550	MPa
Tensile Stress at Yield	(50 mm/min)	ISO 527-2	35	MPa
Tensile Strain at Yield	(50 mm/min)	ISO 527-2	8	%
Tensile Strain at Break	(50 mm/min)	ISO 527-2	> 50	%
Tensile Creep Modulus	(1000 h, elongation ≤ 0.5 %)	ISO 899-1	380	MPa
Shear Modulus		ISO 6721-2	800	MPa
Charpy Impact Strength, notched	(+23 °C)	ISO 179/1eA	3	kJ/m ²
	(-30 °C)	ISO 179/1eA	1.5	kJ/m ²
Charpy Impact Strength, unnotched	(+23 °C)	ISO 179/1eU	110	kJ/m ²
	(-30 °C)	ISO 179/1eU	14	kJ/m ²
Izod Impact Strength, notched	(+23 °C)	ISO 180/1A	3	kJ/m ²
	(-30 °C)	ISO 180/1A	1.3	kJ/m ²
Ball Indentation Hardness (H 358/30)		ISO 2039-1	78	MPa
Thermal				
Melting Point, DSC		ISO 3146	163	°C
Heat Deflection Temperature	(1.8 MPa)	ISO 75-2	55	°C
Heat Deflection Temperature	(0.45 MPa)	ISO 75-2	85	°C
Vicat Softening Temperature	(10 N)	ISO 306	154	°C
Vicat Softening Temperature	(50 N)	ISO 306	90	°C
Other Properties				
Haze	(1 mm plaque)	ASTM D1003	60	%
Density		ISO 1183	0.91	g/cm ³

* Typical values; not to be construed as specifications

Last updated: April 2015