

# Technical Data Sheet **DuPure<sup>®</sup> 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 additivation 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.

### **Quality, Environment and Safety Regulations**

Material Safety Data Sheets and other regulatory documents are available on our web site http://www.ducorchem.com.

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 $\leq 0.5$ %	ISO 899-1	380	МРа
Shear Modulus		ISO 6721-2	800	MPa
Charpy Impact Strength, notched	(+23 °C)	ISO 179/1eA	3	kJ/m²
	(−30 °C)	ISO 179/1eA	1.5	kJ/m <sup>2</sup>
Charpy Impact Strength, unnotched	(+23 °C)	ISO 179/1eU	110	kJ/m²
	(−30 °C)	ISO 179/1eU	14	kJ/m²
Izod Impact Strength, notched	(+23 °C)	ISO 180/1A	3	kJ/m²
	(−30 °C)	ISO 180/1A	1.3	kJ/m²
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 <sup>3</sup>

\* Typical values; not to be construed as specifications

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