

Last updated: April 2015

# Technical Data Sheet DuPure R L 50 E

## **Polypropylene Homopolymer**

#### **Description**

**DuPure L 50 E** is a polypropylene homopolymer (produced with a phthalate-free catalyst) for extrusion applications. DuPure L 50 E shows an easy processability and a good stiffness/impact balance at ambient temperature.

#### **Applications**

**DuPure L 50 E** is suitable for: cast films, OPP films, tape yarns, monofilaments, strapping, and thermoformed parts.

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

Material Safety Data Sheets and other regulatory documents are available on our web site <a href="http://www.ducorchem.com">http://www.ducorchem.com</a>.

Properties		Method	Typical Value*	Unit
Physical				
Melt Flow Rate	(230 °C / 2.16 kg)	ISO 1133	7.5	g/10 min
Mechanical				
Tensile Modulus	(1 mm/min)	ISO 527-2	1500	MPa
Tensile Stress at Yield	(50 mm/min)	ISO 527-2	35	MPa
Tensile Strain at Yield	(50 mm/min)	ISO 527-2	9	%
Tensile Strain at Break	(50 mm/min)	ISO 527-2	> 50	%
Charpy Impact Strength, notched	(+23 °C)	ISO 179/1eA	3.5	kJ/m²
	(-30 °C)	ISO 179/1eA	1.6	kJ/m²
Charpy Impact Strength, unnotched	(+23 °C)	ISO 179/1eU	130	kJ/m²
	(-30 °C)	ISO 179/1eU	15	kJ/m²
Ball Indentation Hardness (H 358/30)		ISO 2039-1	77	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
Film Properties**	(Cast film, µm)			
Gloss	(20°)	ISO 2813	130	%
Haze		ASTM D1003	0.5	%
Tear Strength	(longitud./transvers.)	DIN 53455	43 / 39	MPa
Elongation at Break	(longitud./transvers.)	DIN 53455	670 / 700	%
Flexural Modulus	(longitud./transvers.)	DIN 53121	670 / 650	MPa
Dart Drop Impact Strength	(F50)	ASTM D1709	330	g
Coefficient of Sliding Friction		DIN 53375	> 0.5	-
Other Properties				
Density		ISO 1183	0.91	g/cm³

<sup>\*</sup> Typical values; not to be construed as specifications

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<sup>\*</sup> The values were determined by using film made under our own standardized conditions. When making comparisons with films produced under other conditions, the strong relationship between the film properties and manufacturing must always be taken into account.