

Technical Data Sheet

DuPure[®] R 87 E

Polypropylene Homopolymer

Description

DuPure R 87 E is a polypropylene homopolymer fibre grade (produced with a phthalate-free catalyst), characterized by a narrow/medium molecular weight distribution and a medium crystallinity, providing excellent and consistent process and product behaviour. DuPure R 87 E is particularly suitable for the production of fine denier staple fibres, medium-tenacity continuous filaments (CF), and high-resilience bulked continuous filaments (BCF). The product comprises an advanced phenol free stabilizer package, providing superior gas fading resistance and inherent basic UV stability.

Applications

DuPure R 87 E is suitable for: staple fibres, CF-yarns, high-resilience BCF.

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	%
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	15	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				
Density		ISO 1183	0.91	g/cm ³

* Typical values; not to be construed as specifications