Lupolen 1800 U

Polyethylene, Low Density

Product Description

Lupolen 1800 U is a low density polyethylene (LDPE) resin used in various processing methods such as injection molding and compounding. It exhibits very high flowability and a very good balance of softness and toughness, dimensional stability and good processing. *Lupolen* 1800 U is delivered in pellet form and is not additivated. It is used in a wide range of injection molding applications such as thin-wall packaging (TWIM) and housewares. *Lupolen* 1800 U is also used in the area of compounding for color and additive batches and as a viscosity modifier. Customers have reported that the high melt flow rate (MFR) of *Lupolen* 1800 U enables very good dispersion and homogenization at high loads with pigments and additives. *Lupolen* 1800 U is not intended for use in medical and pharmaceutical applications.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Processing Methods	Extrusion Compounding, Injection Molding
Features	Good Colorability, Fast Cycle (Production) , Low Density, Low Temperature Flexibility, High Flow , Good Processability
Typical Customer Applications	Caps & Closures, Colour Concentrates, Consumer Packaging, Housewares, Sports, Leisure and Toys

Typical Properties	Method	Value	Unit
Physical			
Density (23°C)	ISO 1183	0,918	g/cm³
Melt flow rate (MFR) (190°C/2.16kg)	ISO 1133	65	g/10 min
Mechanical			
ESCR	ASTM D 1693	1	h
Note: Tested in 10% nonionic surfactants			
Tensile Modulus	ISO 527-1, -2	180	MPa
Tensile Stress at Yield	ISO 527-1, -2	8	MPa
Tensile Elongation at Break	ISO 8986-2	85	%
Hardness			
Shore hardness (Shore D)	ISO 868	45	
Thermal			
Melting Temperature	ISO 3146	105	°C
Vicat softening temperature A/50	ISO 306	75	°C

Additional Properties

Spiral length (2 mm/1000 bar/180°C) Basell method: 100 cm
Recommended processing temperature 180°C - 230°C

Notes

Typical properties; not to be construed as specifications.