



Technical Data Sheet

Lupolen 1800S

Low Density Polyethylene

Product Description

Lupolen 1800S is a low density polyethylene resin used in injection molding and other processing methods like compounding. It exhibits high flowability, good softness, toughness and dimensional stability. Lupolen 1800S is delivered in pellet form and is not additivated. Lupolen 1800S is used in applications such as toys, caps & closures, engineering parts, and sports and leisure equipment.

Lupolen 1800S is not intended for use in medical and pharmaceutical applications.

This grade is supported for use in drinking water applications.

Application	Caps & Closures; Sports, Leisure & Toys
Market	Consumer Products; Rigid Packaging
Processing Method	Injection Molding
Attribute	Fast Cycle (Production); Good Flexibility; Good Processability; Low Density; Low Temperature Impact Resistance

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (190 °C/2.16 kg)	20	g/10 min	ISO 1133-1
Density	0.917	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	160	MPa	ISO 527-1, -2
Tensile Stress at Yield	8	MPa	ISO 527-1, -2
Environmental Stress Crack Resistance, F ₅₀ Note: Cond. B, 10% Arkopal N100	1.5	hr	ASTM D1693
Hardness			
Shore Hardness, (Shore D)	45		ISO 868
Ball Indentation Hardness, (H 49/30)	13	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (A/50)	81	°C	ISO 306
Peak Melting Point	106	°C	ISO 11357-3
Processing Parameters			
Melt Temperature	180 - 230	°C	