

Technical Data Sheet

Lupolen 1800H

Low Density Polyethylene



Product Description

Lupolen 1800 H is a low density polyethylene resin used in a wide range of processing methods such as injection molding, blow molding and film extrusion. It exhibits very good softness and toughness and good dimensional stability. *Lupolen* 1800 H is delivered in pellet form and is not additivated. Typical customer applications include caps & closures, lids, foams and champagne corks.

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

Regulatory Status

For regulatory compliance information, see *Lupolen* 1800H [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

This grade is supported for use in drinking water applications.

Status	Commercial: Active
Availability	Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe; South & Central America
Application	Bottles For Consumer Goods; Caps & Closures; Sports, Leisure & Toys
Market	Consumer Products
Processing Method	Blown Film; Extrusion Blow Molding; Injection Molding
Attribute	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)	1.5	g/10 min	ISO 1133-1
Density	0.919	g/cm ³	ISO 1183-1
Mechanical			
Tensile Modulus	200	MPa	ISO 527-1, -2
Tensile Stress at Yield	9	MPa	ISO 527-1, -2
Environmental Stress Crack Resistance, F ₅₀ Note: Cond. B, 10% Arkopal N100	5	hr	ASTM D1693
Hardness			
Shore Hardness, (Shore D)	45		ISO 868
Ball Indentation Hardness, (H 49/30)	15	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (A/50 N)	91	°C	ISO 306
Peak Melting Point	108	°C	ISO 11357-3
Processing Parameters			
Melt Temperature	180 - 230	°C	