Lupolen 4261 AG BD

Polyethylene, High Density

Product Description

***Lupolen* 4261 AG BD** is a high molecular weight high density polyethylene (HDPE). Typical customer applications include automotive fuel tank applications if outstanding biodiesel durability is requested. It is supplied in pellets and is stabilized with antioxidants for the extrusion process.

The product features an outstanding Environmental Stress Cracking Resistance (ESCR), good chemical resistance in combination with an excellent low temperature impact resistance. Typical processes include blow molding and thermoforming. Physical properties and process ability are very close to *Lupolen* 4261 AG.

***Lupolen* 4261 AG BD** is not intended for use in medical and pharmaceutical applications. The product can not be used for food contact applications.

Product Characteristics

Status	Commercial: Active
Test Method used	ISO
Availability	Europe, North America, Asia-Pacific, Australia/NZ, Africa-Middle East, Latin America
Processing Methods	Extrusion Blow Molding, Extrusion Thermoforming
Features	Antioxidant, Biodiesel durability, High ESCR (Environmental Stress Cracking Resistance), High Impact Resistance
Typical Customer Applications	Fuel Tanks

Typical Properties	Method	Value	Unit
Physical			
Density *Note*: at 23°C	ISO 1183	0.945	g/cm³
Bulk density	ISO 60	> 500	g/cm³
Melt flow rate (190/21,6)	ISO 1133	6	g/10 min
FNCT (3.5 MPa, 2% Arkopal N100, 80°C)	ISO 16770	80	h
Mechanical			
ESCR *Note*: Method B	ASTM D 1693	1000	h
Flexural modulus	ISO 178	1100	MPa
Tensile Impact Strength *Note*: -30 °C, notched, Method 1/A	ISO 8256	170	kJ/m²
Note: +23 °C, notched, Method 1/A		250	kJ/m²
Elongation at yield *Note*: Method 2	ISO 527	10	%
Tensile stress at yield *Note*: Method 2	ISO 527	24	MPa
Tensile modulus	ISO 527	900	MPa

Thermal

Melting Temperature	ISO 3146	131	°C
Vicat softening temperature A/50	ISO 306	126	°C
Oxidation induction time (OIT) (200°C)	ISO 11357-6 / EN 728	50	min

Additional Properties

Processing: Recommended melt temperatures: 180-240 °C.

Notes

Typical properties; not to be construed as specifications.