

VP-HD-5510

Description:

VP-HD-5510 is a high density polyethylene, specially developed for large parts blow moulding. This offers high stiffness, good processability, excellent parison melt strength and good ESCR. VP-HD-5510 is manufactured using Basell license.

Features	Applications	Packaging
High stiffness, excellent processability, good parison melt strength, and good stress cracking resistance.	Large parts blow moulding, standard and lightweight Jerry cans, open top drums (up to 110 lit).	Supplied in the form of pellets, or in bulk, or in 25 Kg bags.

Physical properties	Unit	Typical value	Test method
MFR (190 °C / 2.16 Kg)	g/10min.	0.075	ISO 1133
MFR (190 °C / 21.6 Kg)	g/10min.	10	ISO 1133
Density	g/cm ³	0.920	ISO 1183(A)
Bulk density	g/cm ³	>0.5	ISO 60
Thermal properties	Unit	Typical value	Test method
Vicat softening point (A/10N)	°C	127	ISO 306
Mechanical properties	Unit	Typical value	Test method
Tensile modulus of elasticity	MPa	1000	ISO 527-1,2
Flexural modulus - 1% secant	MPa	1000	ASTM D-790
Tensile stress at yield	MPa	27	ISO 527-1,2
Tensile stress at break	MPa	43	ISO 527-1,2
Strain at yield	%	8	ISO 527-1,2
Ball indentation hardness	MPa	49	ISO 2039-1
ESCR F ₅₀ (100%Igepal, method B)	hours	110	ASTM D-1693
Notched impact strength	mJ/mm ²	135	ISO 8256
Izod impact strength	mJ/mm ²	22	ISO 180
Recommended process conditions			
Extruder barrel temperature: 180-220 °C		Melt temperature: 200-235 °C	