POLYETHYLENE
Borstar HE3490-LS
Black High Density Polyethylene for Pressure Pipe

DESCRIPTION
Borstar HE3490-LS is a black, bimodal, high density polyethylene classified as a MRS 10.0 Material (PE 100) produced by the advanced Brostar technology. Well dispersed carbon black gives outstanding UV resistance. Long term stability is ensured by an optimized stabilization system.

APPLICATIONS
Brostar HE3490-LS is recommended for pressure pipe systems in the applications field of drinking water and natural gas, pressure sewerage, relining, sea outfall and industrial. It is especially designed for the production of larger diameter, thick wall pipe, but can be processed for the whole range of diameters. It also shows excellent resistance to rapid crack propagation and slow crack growth.

PHYSICAL PROPERATIES	Typical Value*	Unit	Test Method
Density (Base Resin)	949	kg/m3	ISO 1183/ISO 1872-2B
Density (Compound)	959	kg/m3	ISO 1183/ISO 1872-2B
Melt Flow Rate MFR (190/2.16kg)	<0.1	g/10 min	ISO 1133
Melt Flow Rate MFR (190 C/5.0 kg)	0.25	g/10 min	ISO 1133
Tensile Stress at Yield (50 mm/min)	25	MPa	ISO 527-2
Elongation at Break	>600	%	ISO 527-2
Charpy Impact Strength, noched (0 C)	16	KJ/m2	ISO 179/1eA
Hardness, Shore D	60	-	ISO 868
Carbon Black content	>2	%	ASTM D 1603
Brittleness Temperature	<-70	C	ASTM D 746
ESCR (10% Igepal), F50	>10000	h	ASTM D 1693-A
Thermal Stability (210 C)	>15	min	EN 728

*Data should not be used for specification work.

PROCESSING GUIDELINES
The actual extrusion conditions will depend on the type of equipment used. They will also depend on size and wall thickness of the pipe produced. The following conditions may be used as a guideline when starting up the extruder:

Cylinder 180-210 C