ALMNJAL TRADING EST
PLASTIC RAW MATERIALS
مؤسسة المنجل للتجارة

TECHNICAL DATASHEET

HE3490

PRODUCT DESCRIPTION

HE3490-LS is a black, bimodal, high density polyethylene classi◆ed as a MRS 10.0 material (PE100) produced by the advanced Borstar technology. Well dispersed carbon black gives outstanding UV resistance. Long term stability is ensured by an optimised stabilisation

TRPICAL APPLICATION

HE3490-LS is recommended for pressure pipe systems in the applications ◆eld 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

TYPICAL DATA

PHYSICAL PROPERTIES		Typical Value*	Unit Test Method	
Density	(Base resin)	949	kg/m^3	ISO 1183/ISO 1872-2B
Density	(Compound)	959	kg/m^3	ISO 1183/ISO 1872 2B
Melt Flow Rate	(190°C/2.16 kg)	<0.1	g/10 min	ISO 1133
Melt Flow Rate	(190°C/5.0 kg)	0.25	g/10 min	ISO 1133
Tensile Stress at Yield	(50 mm/min)	25	Mpa	ISO 527-2
Tensile Strain at Break		>600	%	ISO 527-2
Tensile Modulus	(1 mm/min)	1100	MPa	ISO 527-2
Charpy Impact, notched	(0°C)	16	kJ/m^2	ISO 179/1eA
Hardness, Shore D		60		ISO 868
Carbon Black Dispersion		<3		ISO 18553
Carbon Black content		>2	%	ASTM D 1603/ISO 6964
Brittleness Temperature		<-70	°C	ASTM D 746
Resistance to Rapid Crack Propagation, S4 test	(Pc at 0°C, test pipe 250mm SDR11)	>10	bar	ISO 13477
Resistance to Slow Crack Growth	(9.2bar, 80ºC)	>1000	h	ISO 13479
Thermal Stability	(210°C)	>20	min	EN 728
ESCR	(10% Igepal) F_{50}	>10000	h	ASTM D 1693 A

* Data should not be used for specification work.