

## HIGH DENSITY POLYETHYLENE

Producer: Arya Sasol Polymer Company (ASPC) / Iran

### HDPE HCH 5110

#### Description:

**HCH 5110** has been manufactured using Basell Lupotech G ® licensed technology and the appropriate manufacturing parameters and hence is equivalent to **Basell Lupolen® HDPE 5121B** grade.

#### Application:

**HCH 5110** is suitable for Bags, Products for Use in Property

PROPERTIES	VALUE	UNIT	TEST METHOD
<b><u>Physical Properties</u></b>			
Density (at 27°C)	950	kg/cm <sup>3</sup>	ISO 1183
MFR (190°C/21.6kg)	10	dg/min	ISO 1133
MFR (190°C/2.6kg)		dg/min	ISO 1133
MFR (190°C/5kg)		dg/min	ISO 1133
Bulk Density		g/cm <sup>3</sup>	ISO 60
<b><u>Mechanical Properties</u></b>			
Tensile Modulus	1050	Mpa	ISO 527-1
Tensile Strength (MD)	55	MPa	ISO 527-1,3
Tensile Strength (TD)	55	MPa	ISO 527-1,3
Tensile Strain at Break (MD)	580	%	ISO 527-1
Tensile Strain at Break (TD)	620	%	ISO 527-1
Tensile Stress at Yield	26	MPa	ISO 527-1
Tensile Strain at Yield	10	%	ISO 527-1
Elmendorf tear strength (MD)	250	mN	ISO 6383-2
Elmendorf tear strength (TD)	800	mN	ISO 6383-2
<b><u>Thermal Properties</u></b>			
HDT, (0,45MPa)		°C	ISO 75A-1
HDT, (1,80MPa)		°C	ISO 57B-1
Melting Point			ISO 3146
Vicat Temp,(A50,50°C/h,10N)	132	°C	ISO 306
Vicat Temp,(A50,50°C/h,50N)	127	°C	ISO 306
Notched Tensile Impact Strength,(-30°C)		KJ/m <sup>2</sup>	ISO 8256
<b><u>Hardeness</u></b>			
Ball Indentation Hardness		Mpa	ISO 2039-1
<b><u>Chemical resistance</u></b>			
EsCR		h	Basell