# **AKSAD GROUP PETROCHEM**

## HFI5110

#### PRODUCT DESCRIPTION

HFI5110 is a high molecular weight, high density polyethylene, which has a broad molecular weight distribution and high melt strength. This product specially designed for producing thin films with excellent strength and rigidity.

#### **APPLICATIONS**

HFI5110 is recommended for blown film extrusion. This product is suitable for manufacture of high strength grocery sacks, shopping bags and high quality thin films for uni/multi-wall packaging. Films produced with this product can be readily treated and printed to give high quality graphics.

### PROPERTIES

Extruder temperature profile: 200-235°C

Frost line height: 6-8 times die diameter

Blow Up Ratio: 3-5

Recommended film thickness: 15 to 50  $\mu m$ 

Please note that, these processing conditions are recommended by producer only for 100% HFI5110 resin (not in the case of blending with any other compatible material), but because of the many particular factors which are outside our knowledge and control, and may affect the use of product, no warranty is given

Properties	Value	Unit	Method
Density (23 oC)	951	kg/cm3	ISO 1183
MFI (190 oC /21.6Kg)	10	dg/min	ISO 1133
Tensile Modulus of elasticity	1050	MPa	ISO527-1;2
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
Elemendorf tear strength(MD)	250	mN	ISO 6383-2
Elemendorf tear strength(TD)	800	mN	ISO 6383-2
Melting Point	132	C°	ISO 3146
Vicat Temperature , (A50,50 oC/h , 10N)	127	C°	ISO 306
Additives :Antioxidant – Heat stabilizer Zinc Stearate			

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#### Notes

(1) Typical Values: not to be construed as specifications limits.

(2) Properties are based on 20 µm blown film produced at a melt temperature of 220°C and 4 BUR using 100% HFI5110.

### TOXICITY AND SAFETY

For more detailed information on handling, storage, safety parameters, refer to relevant SDS of Components.

#### Note:

This information is based on our current knowledge and experience .in view of many factors that may affect processing and application, this data does not relive processors from the responsibility of carrying out their own tests and experiments, neither does it imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.