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ARYA SASOL POLYMER COMPANY

## HIGH-DENSITY POLYETHYLENE HFI5110

HFI 5110 is a high molecular weight, high-density polyethylene with broad molecular weight distribution and 1-hexene as a co-monomer, specially developed for producing thin films with excellent strength and rigidity. This product is suitable for manufacturing of high strength grocery sacks, shopping bags and high quality thin films for uni/multi-wall packaging.

Producer	Characteristic Properties	Applications	Additive
Arya Sasol Petrochemical	High tear resistance High melt stability High quality graphic printing	Packaging Film	Antioxidant: Yes Zinc Stearate: Yes Antiblock: No Slip Agent: No

### Typical Properties

Resin Properties	Unit	Typical	ASTM Method
High Load Melt Flow Index (190 °C/ 2.16 kg)	dg/min	10	ISO 1133

Density	kg/m3	951	ISO 1183
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Thermal Properties	Unit	Typical Value	Test Method
Vicat Softening Temperature (Method A/10N)	°C	127	ISO 306

Melting Temperature	°C	132	ISO 3146
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Mechanical Properties	Unit	Typical Value	Test Method
Tensile Stress at Yield	MPa	26	ISO 527-1,3

Tensile Strain at Break (TD)	%	620	ISO 527-1,3
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Tensile Strength (TD)	MPa	55	ISO 527-1,3
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Tensile Modulus of Elasticity	MPa	1050	ISO 527-1,2
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Tensile Strain at Yield	%	10	ISO 527-1,3
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Elmendorf Tear Strength (TD)	mN	800	ISO 6383-2
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