

# HDPE

HDPE for Blown Film

## ▶ F120A

### ● Description

F120A is a high-density polyethylene resins for films. This grade is designed to be processed in conventional blown film equipment. F120A is suited to general-purpose packaging films and shopping bag applications.

### ● Characteristics

Thanks to bimodal design of molecular composition, F120A offer excellent processability even though this is fractional melt grades. Superior mechanical strength of these grades is attributable to extremely high molecular weight. Advantage in both processability and mechanical performance of these grades provides a enormous down-gauging potential for many applications

### ● Applications

- ▶ Shopping bag, Industrial packing film

### ● Major Property Requirements

- ▶ Good processability
- ▶ Excellent optical property and tensile strength

## ● Physical Properties

### ▶ Resin Properties

Properties		Test Method	Units	F120A
Melt Index		ASTM D1238 190 °C / 2.16 kg	g/10min	0.044
Density		ASTM D1505	g/cm <sup>3</sup>	0.956
Tensile Strength	at Yield	ASTM D638	Kg/cm <sup>2</sup>	230
	at Break			300
Flexural Stiffness		ASTM D747	Kg/cm <sup>2</sup>	10,000
Izod Impact Strength		ASTM D256	Kg cm/cm	> 30
Rockwell Hardness		ASTM D785	R scale	55
Vicat Softening Point		ASTM D1525 1kg	°C	124
Brittle Temperature		ASTM D746	°C	< -80

### ▶ Film Properties

Properties		Test Method	Units	F120A
Film Thickness		-	µm	20
Tensile Strength at Break	MD	ASTM D 882	kg/cm <sup>2</sup>	550
	TD	ASTM D 882	kg/cm <sup>2</sup>	500
Elongation at Break	MD	ASTM D 882	%	380
	TD	ASTM D 882	%	450
Elmendorf Tear Strength	MD	ASTM D 785	kg/cm <sup>2</sup>	6
	TD	ASTM D 785	kg/cm <sup>2</sup>	200
Dart Drop Impact Strength		ASTM D 1525	g	>200

Data performed by or on behalf of Hanwha Total

## ● Food Contact Application

- ▶ Hanwha Total F120A meets the FDA requirements in the Code of Federal Regulations in 21 CFR 177.1520 for food contact.
- ▶ In case you might need additional technical or regulatory information, please contact Hanwha Total Customer Service Team.

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