

HDPE

HDPE H5604F

HIGH DENSITY POLYETHYLENE (HDPE)

H5604F is a high density polyethylene product of bi-modal process which suitable for the high quality film application. It is recommended for general purpose film with high tensile strength.

Typical Application	Product Characteristics	International Compliance
<ul style="list-style-type: none"> Shopping bags and T-shirt bags Garbage bags Liner bags 	<ul style="list-style-type: none"> High tensile strength with good dart impact strength High stiffness Low gel content Good moisture barrier Food contact applicable 	<ul style="list-style-type: none"> U.S FDA 21 CFR 177.1520 Regulation (EU) No.10/2011 Packaging and Packaging waste Directive 94/62/EC RoHS Directive 2011/65/EU (RoHS 2) REACH Regulation (EC) No.1907/2006

Film Properties

Properties	Test Method	Typical Value	Unit
Tensile Strength at Yield	ASTM D 882	MD: -*, TD: 250*	kg/cm ²
Tensile Strength at Break	ASTM D 882	MD: 620*, TD: 310*	kg/cm ²
Tensile Modulus, 2% Secant	ASTM D 882	MD: 8,200*, TD: 8,000*	kg/cm ²
Elongation at Break	ASTM D 882	MD: 240*, TD: 450*	%
Elmendorf Tear Strength	ASTM D 1922	MD: 3*, TD: 80*	g
Dart Impact Strength	ASTM D 1709	230*	g

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate	ASTM D 1238 @ 190 °C, 2.16 kg	0.04	g/ 10 min
Density	ASTM D 1505 (anneal @ 100 °C)	0.954	g/cm ³
Melting Point	ASTM D 2117	131	°C
Vicat Softening Point	ASTM D 1525	124	°C
Brittleness Temperature	ASTM D 746	<-60	°C
ESCR	ASTM D 1693 (Method B, Compression Molded, 25% Igepal, 50 °C)	>1000	Hours, F ₅₀

Processing Guidelines

The actual extrusion condition depends on type of using machine, size and film thickness of product required. Generally, Melt temperature should be 180 °C–200 °C with blow up ratio (BUR) = 3-5 times and frost line height (FLH) = 8-10 times of die diameter.

1. The given values are typical value measured on the product. Values herein are not to be constructed as a product specification.
2. Conversion factor for changing unit from kg/cm² to MPa is divided by 10.20.
3. (*) Properties obtained from SCGC internal test, film thickness 12 micron, BUR 5:1, MD = Machine Direction, TD = Transverse Direction.