

Product Description

EL-Lene H5480S is a high density polyethylene resin which is suitable for producing monofilament or flat yarn products. It is manufactured by extrusion process with spinnerette die, T-die, annular die, coathanger die, etc.

Typical Application

- Net
- Rope
- Tarpaulin

Product Characteristics

- High tenacity
- Good product color
- Food contact applicable (Complies with U.S FDA 21 CFR 177.1520)

Physical Properties

Property	Test Method	Value	Unit
Melt Flow Rate	ASTM D 1238 @ 190°C, 2.16 kg	0.8	g/10 min
Density	ASTM D 1505	0.954	g/cm ³
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 50 mm/min	270	kg/cm ²
Tensile Strength at Break	ASTM D 638 @ Crosshead speed 50 mm/min	390	kg/cm ²
Elongation at Break	ASTM D 638 @ Crosshead speed 50 mm/min	1200	%
Flexural Modulus	ASTM D 790	10000	kg/cm ²
Notched Izod Impact	ASTM D 256 @ 23°C	17	kg.cm/cm
Notched Izod Impact	ASTM D 256 @ 0°C	14	kg.cm/cm
Hardness	ASTM D 2240	65	Shore D
ESCR	ASTM D 1693 @ 50°C (Condition B, Compression Molded, 25% Igepal)	30	hrs, F ₅₀
Melting Point	ASTM D 2117	131	°C
Vicat Softening Point	ASTM D 1525	126	°C
Brittleness Temperature	ASTM D 746	< - 60	°C

Note : Conversion factor for changing unit from kg/cm² to MPa is divided by 10.20

Processing Techniques

The actual processing conditions depend on each machine type, product dimensions and environment. Generally, recommended screen mesh size 100-120 and allowable pressure should be less than 135 bar.

Recommended processing conditions:

Monofilament : Melt temperature range 250 - 280°C, Stretching Temperature 96 - 100°C, Stretching Ratio 8 - 12

Flat yarn : Melt temperature range 190 - 260°C, Stretching Temperature 100 - 130°C, Stretching Ratio 5 - 7

Product Available Form

Product Handling

- Pellet
- 25 kg loose bag
- Big Bag with specified weight

Product Technical Assistance

For technical assistance or further information on this product or any other EL-Lene products, please contact EL-Lene representatives.

The information presented in this data sheet is offered in good faith. SCG Plastics Co., Ltd. accepts no responsibility for the accuracy or interpretation of the information presented. The users have to establish for yourself the most suitable formulation, production method and control tests, to ensure the uniformity and quality of your product in compliance with all related laws.