

**Product Description**

EL-Lene H1000PC is a black, bimodal technology, high density polyethylene compound classified as a MRS 10.0 material (PE100) providing superior in mechanical properties and processability. EL-Lene H1000PC also shows excellent resistance to rapid crack propagation and slow crack growth. In addition, It includes a good dispersion of carbon black pigment and anti-oxidant to ensure excellent long term in UV resistance and thermal stability.

Typical Application

- Potable water pipes
- Gas pipes
- Drainage pipes
- Sewerage pipes
- Industrial pipes
- Corrugated pipes

Product Characteristics

- Good processing
- Excellent thermal stability
- High resistance to slow crack growth
- Resistance to rapid crack propagation
- Low sagging

International specification

- PE 100+ Association
- PIPA, Australia
- INSTA-CERT Mark, Sweden
- NF Mark, France
- SIRIM, Malaysia
- AENOR, Spain
- Belgaqua, Belgium
- TISI, Thailand

Physical properties

Property	Test Method	Value	Unit
Melt Flow Rate	ISO 1133 @ 190°C, 5.0 kg	0.25	g /10 min
Density (Compound)	ISO 1183	0.959	g / cm ³
Tensile Strength at Yield	ISO 527 @ Crosshead speed 100 mm/min	23	MPa
Tensile Strength at Break	ISO 527 @ Crosshead speed 100 mm/min	> 30	MPa
Elongation at Break	ISO 527 @ Crosshead speed 100 mm/min	> 600	%
Carbon Black Content	ISO 6964	2.25	% wt
Carbon Black Dispersion	ISO 18553	≤ 3	-
Oxidative induction time	NF EN 728 @ 200°C	≥ 60	min.
Flexural Modulus	ASTM D 790	1,000	MPa
Hardness	ASTM D 2240	64	Shore D
ESCR	ASTM D 1693	>10,000	Hrs, F ₀
Resistance to slow crack growth	ISO 13479 @ 80°C	> 500	Hrs
Rapid crack propagation	ISO 13477	≥ 10	bar
Resistance to gas constituents	ISO 1167	> 20	Hrs

The given values are typical value measured on the product. Values herein are not to be construed as a product specification.

Processing Guidelines

Processing of EL-Lene H1000PC will depend on equipment used, size and wall thickness of the pipe produced. In general, melt temperature should be in the range of 200 - 220 °C. Drying before use at 80 - 90 °C for 1-2 hour is recommended.

Product Technical Assistance

For technical assistance or further information on this product or any other SCG Chemicals' products, please contact your technical service or at the email address, pipe_products@scg.co.th. The address or telephone number are specified below.

Product Available Form

- Black pellet

Product Packaging

- 25 kg loose bag
- 750 kg big bag or Sea bulk



**Storage**

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene Company Limited/ Thai Polypropylene Company Limited.
- Product(s) should be stored in dry and dust free location at temperature below 50°C and protected from direct sunlight and/or heat, well-ventilated area, away from incompatible materials and food and drink, as this may lead to quality deterioration, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.
- Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
- The storage area should be stable and not be slopped.

EL-Lene™ EL-Pro™ EL-Wax™



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