



# EL-LENE H1000PC

Black PE Compound Premium Quality by Bi-Modal Technology

## Product Description

EL-LENE H1000PC is a black polyethylene compound classified as a MRS 10.0 material (PE100). Well dispersed carbon black creates outstanding UV resistance.

## Typical Application

- Gas pipes
- Drinking water pipes
- Sewerage pipes

## Product Characteristics

- High rapid crack propagation
- High resistance to slow crack growth
- Good processing

## Physical properties

Property	Test Method	Value	Unit
Melt Flow Rate	ASTM D 1238 @ 190°C, 2.16 kg	0.04	g /10 min
Density (Compound)	ASTM D 1505	0.959	g / cm <sup>3</sup>
Tensile Strength at Yield	ASTM D 638 @ Crosshead speed 100 mm/min	26	MPa
Tensile Strength at Break	ASTM D 638 @ Crosshead speed 100 mm/min	36	MPa
Elongation at Break	ASTM D 638 @ Crosshead speed 100 mm/min	880	%
Flexural Modulus	ASTM D 790	1,000	MPa
Notched Izod Impact	ASTM D 256 @ 23°C	36	kg .cm/cm
Notched Izod Impact	ASTM D 256 @ 0°C	32	
Notched Izod Impact	ASTM D 256 @ -20°C	25	
Hardness	ASTM D 2240	64	Shore D
ESCR	ASTM D 1693	>10,000	Hrs, F <sub>0</sub>
Carbon Black Content	ASTM D 1603	2.3	% wt
Oxidative induction time	ISO/TR10837 @ 200C	>70	min.
MRS (Minimum required strength	ISO TR9080	10	MPa
Resistance to slow crack growth	ISO 13479 @ 80°C	>165	h
Rapid crack propagation	ISO 13477	≥ 12	bar
Resistance to gas constituents	ISO 1167	> 20	h

## Processing Techniques

For extrusion of EL-Lene H1000PC, it is recommended to use a screw giving good homogenisation without excessive shear. Standard PE screws have proven satisfactory and will be used with good result. For normal extrusion equipments we suggest a melt temperature of 200 -240°C, and drying 80 - 95°C for 1 - 2 hours.

## Product Technical Assistance

For technical assistance or further information on this product or any other EL-Lene products contact ; EL-Lene representative.

## Product Available Form

- Black pellet

## Product Handling

- 25 kg loose bag, 25 kg bag on pallet
- Big Bag with specified weight

The information presented in this data sheet is offered in good faith. CCC Chemical Commerce 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

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