

## Product Description

EL-Lene H1000PBL is a blue ( no lighter than RAL5005), bimodal, high density polyethylene compound that is specially designed for water pressure pipes, especially for drinking water pipes. EL-Lene H1000PBL is designed as PE100 pipes providing excellent in mechanical properties, and processability. Well dispersed UV stabilizer and anti-oxidant which also provide outstanding UV resistance and high thermal stability for long term using.

Typical Application	Product Characteristics	International specification
<ul style="list-style-type: none"> <li>■ Drinking water pipes</li> <li>■ Stripe for PE100 pipe</li> </ul>	<ul style="list-style-type: none"> <li>■ Good processing</li> <li>■ High thermal stability</li> <li>■ Outstanding mechanical strength</li> <li>■ High UV resistance</li> </ul>	<ul style="list-style-type: none"> <li>■ NF Mark, France</li> </ul>

## Physical properties

Property	Test Method	Value	Unit
Melt Flow Rate	ISO 1133 @ 190°C, 5.0 kg	0.28	g /10 min
Density (Compound)	ISO 1183	0.951	g / cm <sup>3</sup>
Tensile Strength at Yield	ISO 527 @ Crosshead speed 100 mm/min	23	MPa
Tensile Strength at Break	ISO 527 @ Crosshead speed 100 mm/min	36	MPa
Elongation at Break	ISO 527 @ Crosshead speed 100 mm/min	850	%
Oxidative induction time	ISO/TR10837 @ 200°C	>50	min.
MRS (Minimum required strength)	ISO 9080	10	MPa
Resistance to slow crack growth	ISO 13479 @ 80°C	> 1,000	Hrs
Vicat softening temperature	ASTM D 1225	122	°C
Hardness	ASTM D 2240	66	Shore D
Notched Izod Impact	ASTM D 256 @ 23°C	31	kg .cm/cm
Notched Izod Impact	ASTM D 256 @ 0°C	27	kg .cm/cm
Notched Izod Impact	ASTM D 256 @ -20°C	20	kg .cm/cm
Flexural Modulus	ASTM D 790	1,000	MPa
Brittleness temperature	ASTM D 746	<-60	°C
ESCR	ASTM D 1693	>10,000	Hrs, F <sub>0</sub>

## Processing Guidelines

For extrusion of EL-Lene H1000PBL, it is recommended to use a screw giving good melting and mixing without excessive shear. A single or double flight PE screws have proven satisfactory and will be used with good result. For normal extrusion equipments we suggest a melt temperature of 200 -220°C.

## Product Technical Assistance

For technical assistance or further information on this product or any other SCG Chemicals' products, please contact your SCG Chemicals technical service at the address or telephone number as specified below.

Product Available Form	Product Packaging
<ul style="list-style-type: none"> <li>■ Blue pellet</li> </ul>	<ul style="list-style-type: none"> <li>■ 25 kg loose bag</li> <li>■ 750 kg big bag or Sea bulk</li> </ul>

SCG Plastics Company Limited / SCG Performance Chemicals Company Limited

1 Siam Cement Road, Bangsue, Bangkok, 10800 Thailand.

Tel. +66 2586 2922, +66 25863675, +66 25865511 Fax +66 25863676

[www.chemicals.scg.co.th](http://www.chemicals.scg.co.th)

Rev. Jan' 12 Valid until next revision



## 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 sloped.

## Safety

- The product is not classified as a hazardous material.
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery, and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.

## Recycling

- The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.

## Related Documents

- The lastest version of this document will be available at our website, [www.chemicals.scg.co.th](http://www.chemicals.scg.co.th), or can be obtained from the SCG Plastics/SCG Performance Chemicals technical service.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
  - Material Safety Data Sheet
  - Statement on compliance to food contact regulations

## Disclaimer

- The product can be used only for the application as specified hereabove.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.
- We make no warranties which extend beyond the description contained herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
- It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose. The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.
- No liability can be accepted in respect of the use of our products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third party materials.

EL-Lene™ EL-Pro™ EL-Wax™



are registered trademarks of SCG Chemicals, Thailand.

SCG Plastics Company Limited / SCG Performance Chemicals Company Limited

1 Siam Cement Road, Bangsue, Bangkok, 10800 Thailand.

Tel. +66 2586 2922, +66 25863675, +66 25865511 Fax +66 25863676

[www.chemicals.scg.co.th](http://www.chemicals.scg.co.th)

Rev. Jan' 12 Valid until next revision