



Technical Data Sheet

Product Type

White HDPE Compound

Product Name

SCGC™ HDPE

Product Grade

H1000PWI

Product Description

SCGC HDPE H1000PWI is a white HDPE compound made for external coating on SCGC HDPE H1000PC for above ground pipe applications. It provides high mechanical properties, good processability, and low heat absorption. In addition the good dispersion and high concentration of stabilizers contribute excellent long term UV resistance and thermal stability.

Typical Application

- Above ground pipes
- Co-extrusion of pipes

Product Characteristics

- Good processing
- Excellent thermal stability
- Good UV resistance
- Reduce heat conductivity

Physical Properties

Properties	Test Method	Typical Value	Unit
Melt Flow Rate	ISO 1133 @190 °C, 5.0 kg	0.20	g/10 min
Density (Base resin)	ISO 1183	0.949	g/cm ³
Density (Compound)	ISO 1183	0.972	g/cm ³
Tensile Strength at Yield	ISO 527 @ Crosshead speed 100 mm/min	22	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	%
Oxidative Induction Time	ISO 11357 @ 210 °C	> 50	min
Flexural Modulus	ASTM D 790	1000	MPa
Hardness	ASTM D 2240	62	Shore D

Note:

- The given values are typical value measured on the product. Values herein are not to be constructed as a product specification.
- Conversion factor for changing unit from kg/cm² to MPa is divided by 10.20.

Thai Polyethylene Co., Ltd.

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Processing Guidelines

For extrusion of SCGC HDPE H1000PWI, 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 equipment, we suggest a melt temperature of 200 – 220 °C, and drying 80 – 90 °C for 1 - 2 hours before use.

Product Technical Assistance

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

Product Available Form

- White Pellet

Product Packaging

- 25 kg loose bag
- 25 kg stretch wrap palletized
- 750 kg big bag
- Sea bulk container

Storage

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene 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.

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 Chemicals technical services.

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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 Datasheet for details on various aspects of safety, recovery and disposal of the products; for more information, contact your SCG Chemicals technical services.

Related Documents

- The latest version of this document will be available at our website, www.scgchemicals.com, or can be obtained from the SCG Chemicals technical services.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
 - Safety Data Sheet.
 - Declaration of Compliance.

Disclaimer

- The Applications specified herein is for reference only.
- It is customer's responsibilities to inspect and test the product for suitability of the customer's own use and purpose. The customer is responsible for appropriate, safe, legal use, processing and handling of the product.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
- We make no warranties which extend beyond the description herein. Nothing herein shall constitute any implied warranty of merchantability or fitness for a particular purpose.
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