

PE100+ QUALITY MATERIALS

Valid until October 2011

The PE100+ Association ensures the very highest quality of PE100 products by continuously monitoring three fundamental properties:

- 1) Creep Rupture Strength,
- 2) Stress Crack Resistance and
- 3) Resistance to Rapid Crack Propagation.

Network engineers have identified these to be crucial for increasing the use of PE pipes in gas and water distribution networks.

Property	Test Method	PE 100+ Association
		requirements
Creep Rupture Strength	Pressure test at 20°C	≥ 200 h
	and 12.4 MPa	
Stress Crack Resistance	Pipe notch test at 80°C	≥ 500 h
	and 9.2 bar	
Resistance to Rapid Crack Propagation	S4 Test at 0°C	p _c ≥ 10 bar

All tests are performed on 110mm - SDR 11 pipe.

On behalf of the PE100+ Association, <u>Kiwa Gastec Certification B.V.</u>, an independent testing authority in the Netherlands repeats those test rounds together with various independent and internationally respected laboratories every seven months.

The following products met the PE 100+ requirements

Product	Manufacturer	Production Country
BorSafe TM HE3490-LS (black)	Borealis AG	Sweden
BorSafe™ HE3494-LS (blue)	Borealis AG	Finland
BorSafe™ HE3490-LS (black)	Borouge Pte., Ltd.	Abu Dhabi
ELTEX® TUB 121 (black)	Ineos Polyolefins	France
ELTEX® TUB 125 N2025 (orange)	Ineos Polyolefins	France
ELTEX® TUB 124 N2025 (blue)	Ineos Polyolefins	France
ELTEX® TUB 121 N3000 (black)	Ineos Polyolefins	Belgium
Hostalen CRP 100 (black)	LyondellBasell	Germany
Hostalen CRP 100 (blue)	LyondellBasell	Germany
Hostalen CRP 100 Resist CR (black)	LyondellBasell	Germany
HI-ZEX® 7700 MBK (black)	Prime Polymer Co., Ltd.	Japan
EVL-H®SP5505BK (black)	Prime Polymer Co., Ltd.	Japan
SABIC VESTOLEN® A 6060 R (black)	SABIC Polyolefine GmbH	Germany
SABIC VESTOLEN® A 6060 R (blue)	SABIC Polyolefine GmbH	Germany
EL-LENE H1000PC (black)	SCG Chemicals & Thai Polyethylene, Ltd	Thailand
HDPE XS10H (blue)	Total Petrochemicals	Belgium
HDPE XS10B (black)	Total Petrochemicals	Belgium
HDPE XS10 Orange YCF (orange)	Total Petrochemicals	Belgium