

XL-PEARL™ 60

XL-PEARL© 60

Description

XL-PEarl 60 blend is for the manufacture of dry silane masterbatches based on porous polymer carriers. XL-PEarl 60 blend is a crosslinking system designed for crosslinking high-density polyethylene (HDPE) pipe using the XL-PEarl blend one-step process.

It is only available for licensees of the XL-PEarl blend technology.

Key Features and Benefits

- Pipes manufactured using the XL-PEarl blend technology have excellent mechanical properties, outstanding chemical resistance and may be used at temperatures up to 110°C (230°F)
- Special stabilizers prevent premature polymerization of the grafting agent and provide excellent aging properties of crosslinked polyethylene
- High quality surface finish of pipes results from use of the XL-PEarl blend system

Typical Physical Properties

Appearance	Clear liquid
Color	Colorless to straw
Viscosity, mPa s (cP), @ 23°C	2.5
Specific Gravity, g/cm ³ , @25°C	0.969
Flash Point, Tag Closed Cup, ASTM D56-79, °C	23

Potential Applications

Manufacturing of XL-PEarl 60 blend masterbatches for the crosslinking of high-density

polyethylene (HDPE) pipes for under-floor heating, hot water pipes for radiators and potable water distribution.

Patent Status

Standard copy to come

Product Safety, Handling and Storage

Standard copy to come

Processing Recommendations

Performance

High-density polyethylene pipes crosslinked with XL-PEarl 60 blend masterbatches, a suitable stabilizer masterbatch (such as A/O 7017-FT-50 (PolyOne), REX-Stab T-59 (Polyrex), PLP 2020 STMB (Plascom), PE A/O 02012 (Vibatan) etc.) can meet following specifications:

- DIN 16892 (Rohre aus vernetztem Polyethylen)
- EN (155 WI 023)

Application-Potable Water Pipe:

Extruder	Troester 45mm/25L/D
Base Polymer	Lupolen 5031L
Barrel Temperature	170 / 180 / 190 / 200 / 210°C

		3.4% XL-PEarl 60 Blend Masterbatch PE 50 + 5%	3.6% XL-PEarl 60 Blend Masterbatch PE 50 + 5%
Extruder Parameter RPM Melt Temperature Surface Finish	°C	10 223 Smooth	10 224 Smooth
Gel Content	DIN 16892	72%	77%

Recommended Resins Are:

Type of HDPE Resin	Recommended	BestPerformance
Melt index (190°C/2.16 kg), g/10 min	0.2 -8	6 -8
Density, g/cm ³	0.945-0.955	0.950

Commercially Available HDPE Resins:

HDPE	From	MFI	Density
Lupolen 5031L	Elenac	5-7	0.952
Eltex A4040	Solvay	4	0.944
Eltex B4002	Solvay	0.3	0.949

Limitations

Standard copy to come

Contact Information

Email

commercial.services@momentive.com

Telephone

Americas

+1 800 295 2392

Toll free*

+704 805 6946

Direct Number

*All American
countries

Latin America

Brazil

+55 11 4534 9650

Direct Number

Mexico

+52 55 2169 7670

Direct Number

EMEAI- Europe, Middle East, Africa & India

Europe

+390510924300

Direct number

India, Middle East & Africa

+ 91 44 71212207

Direct number*

*All Middle Eastern
countries, Africa, India,

ASIA PACIFIC

China

800 820 0202

Toll free

+86 21 3860 4892

Direct number

Japan

+81 3 5544 3111

Direct number

Korea

+82 2 6201 4600

For literature and technical assistance, visit our website at: www.momentive.com

DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY “SUPPLIER”), ARE SOLD SUBJECT TO SUPPLIER’S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER’S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier’s materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier’s products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier’s standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

*XL-PEarl™ ist ein Markenname der Momentive Performance Materials Inc.

The use of the “™” symbol designates registered or unregistered trademarks of Momentive Performance Materials Inc. or its affiliated companies. Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.