

## XL-PEARL™ 31

### XL-PEARL© 31

#### Description

XL-PEARL 31 blend is for the manufacture of dry silane masterbatches based on porous polymer carriers. XL-PEARL 31 blend is a crosslinking system developed for the manufacture of crosslinked LLDPE low- and medium-voltage cables using the XL-PEARL blend one-step process.

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

#### Key Features and Benefits

- XL-PEARL 31 blend can be used with a wide range of stabilized LLDPE, MDPE and HDPE poly ethylene grades for optimum costeffectiveness. This also applies for nonstabilized resin used in association with an antioxidant masterbatch
- A high onset temperature of the silane crosslinking agent improves process stability and minimizes pregrafted/crosslinked particles in the insulation layer

#### Typical Physical Properties

|  |              |
|--|--------------|
| Appearance                                   | Clear liquid |
| Color  | Light yellow |
| Viscosity, mPa s (cP), @ 23°C                | 2.2          |
| Specific Gravity, g/cm <sup>3</sup> , @ 23°C | 0.962        |
| Flash Point, Tag Closed Cup, ASTM D56-79, °C | 23           |

#### Potential Applications

Manufacturing of XL-PEARL 31 blend masterbatches for the crosslinking of low- and medium-voltage power cables based on stabilized polyethylene resins.

**Patent Status**

Standard copy to come

**Product Safety, Handling and Storage**

The Self-Accelerating Decomposition Temperature (SADT) of XL-PEARL 31 blend in 217L drums is predicted to be above 65°C (149°F). However, it is recommended that drums of XL-PEARL 31 blend not be stored or shipped at temperatures above 30°C (86°F), since some degradation of product may occur.

Standard copy to come

**Processing Recommendations**

Recommended resins

XL-PEARL 31 blend can be used either with nonstabilized polyethylene resins and an antioxidant masterbatch or with stabilized cable grade resins. Recommended types are:

- Exxon Escorene LLN 1004YB, in conjunction with a stabilizer masterbatch
- BP 3000 series
- Aspel 1200 - 1600 series

Other polyethylene resins should have the following properties:

|               |                             |                                  |
|---------------|-----------------------------|----------------------------------|
| LDPE resins:  | Melt index (190°C/2.16 kg): | 0.2 to 0.5 g/10 min.             |
|               | Density:                    | 0.915 to 0.935 g/cm <sup>3</sup> |
| LLDPE resins: | Melt index (190°C/2.16 kg): | 0.5 to 6 g/10 min.               |
|               | Density:                    | 0.900 to 0.935 g/cm <sup>3</sup> |

**Limitations**

Standard copy to come

**Contact Information**

Email

[commercial.services@momentive.com](mailto:commercial.services@momentive.com)

**Telephone**

**Americas**

**Latin America**

**EMEAI- Europe, Middle  
East, Africa & India**

**ASIA PACIFIC**

|                         |                  |  |                  |
|-------------------------|------------------|--|------------------|
| +1 800 295 2392         | <b>Brazil</b>    | <b>Europe</b>  | <b>China</b>     |
| Toll free*              | +55 11 4534 9650 | +390510924300  | 800 820 0202     |
| +704 805 6946           | Direct Number    | Direct number  | Toll free        |
| Direct Number           |                  |  | +86 21 3860 4892 |
|                         |                  |  | Direct number    |
| *All American countries | <b>Mexico</b>    | <b>India, Middle East &amp; Africa</b>               | <b>Japan</b>     |
|                         | +52 55 2169 7670 | + 91 44 71212207                                     | +81 3 5544 3111  |
|                         | Direct Number    | Direct number*                                       | Direct number    |
|                         |                  | <b>*All Middle Eastern countries, Africa, India,</b> | <b>Korea</b>     |
|                         |                  |  | +82 2 6201 4600  |

For literature and technical assistance, visit our website at: [www.momentive.com](http://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.