

XL-PEARL* 51 MB HDPE40

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Description

XL-PEarl 51 blend is for the manufacture of dry silane masterbatches based on porous polymer carriers. XL-PEarl 51 blend is a fully stabilized crosslinking system designed for crosslinking polyethylene low- and medium-voltage copper 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 51 blend masterbatches can be used with a wide range of nonstabilized polyethylene grades for optimum cost-effectiveness.
- With an appropriate resin, insulated copper cables crosslinked with XL-PEarl 51 blend masterbatches meet the IEC aging test of 10 days at 135°C (275°F).
- A high onset temperature for grafting improves processing stability and minimizes scorch/crosslinked particles in the insulation layer.

Typical Physical Properties

Appearance	Clear liquid
Color	Light yellow
Viscosity, mPa s (cP), @ 25°C	3.8
Specific Gravity, g/cm ³ , @ 25°C	0.985
Flash Point, Tag Closed Cup, ASTM D56-79, °C	23

Potential Applications

Manufacturing of XL-PEARL 51 blend masterbatches for the crosslinking of low- and medium-voltage power cables based on nonstabilized polyethylene resins.

Patent Status

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Product Safety, Handling and Storage

This product has a Self-Acceleration Decomposition Temperature (SADT) of 65°C (149°F), as tested in a 55-gallon drum. Therefore, never store or stow drums of this product at temperatures above 30°C (86°F). Exposure to these elevated temperatures may result in exothermic reactions and fire. Do not consider bulk storage without consulting the manufacturer. Prolonged storage above 30°C (86°F) may affect product performance and shorten the expected shelf life of this product, which is approximately one year.

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Processing Recommendations

Performance

Moisture-cured cables produced with XL-PEARL 51 blend utilizing the XL-PEARL blend process can meet the IEC 502 cable specification.

XL-PEARL 51 blend masterbatches can only be used with nonstabilized polyethylene resins.

Recommended types are:

LDPE resins:	Melt index (190°C/2.16 kg):	0.2 to 0.5 g/10 min.
	Density:	0.915 to 0.925 g/cm ³
LLDPE resins:	Melt index (190°C/2.16 kg):	2 to 6 g/10 min.
	Density:	0.915 to 0.925 g/cm ³

Limitations

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Contact Information

For product prices, availability, or order placement, contact our customer service at [Momentive.com/Customerservice/](https://www.momentive.com/Customerservice/)

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

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