

## Polyethylene

### LE4146

#### Standstill compound for natural XLPE in MV application

#### Description

LE4146 is a low density thermoplastic polyethylene compound. It is well stabilized and has the same basic flow properties as Borealis standard crosslinkable compounds.

#### Applications

LE4146 is intended as a standstill compound for XLPE insulated medium voltage (MV) AC cables with rated voltages up to 69 kV (Um = 72,5 kV). It can be used during stop-start operations for tool changes.

The values are voltage between phases as defined in IEC 60183.

#### Physical Properties

Property	Typical Value	Test Method
	Data should not be used for specification work	
Density (Base Resin)	922 kg/m <sup>3</sup>	ISO 1183
Melt Flow Rate (190 °C/2,16 kg)	2 g/10min	ISO 1133
Moisture	< 200 ppm	ISO 15512

#### Processing Techniques

To produce a good and reliable cable, it is essential to ensure careful and very clean handling of the insulation material. Hence all material handling should preferably be conducted in closed systems and in clean room conditions. LE4146 can be used in MV lines without automatic conductor changes during short start-stop operations for tool changes. Limits may apply to the total number of such short stops before stopping for cleaning is needed. For start-up procedures it is recommended to use regular XLPE compound.

Please contact your local Borealis representative for specific assistance.

#### Extrusion

LE4146 can be extruded using similar conditions as e.g. LS4201R. A screen-pack on the extruder is recommended for improved melt homogenisation.

Melt temperature 125 - 135 °C

#### Packaging

Package: Octabins (1000kg)  
Bags (25kg – 1375kg load per pallet)

#### Storage

LE4146 has a shelf life of 12 months from production date if stored in unopened original packages, under dry and clean conditions at temperatures between 10 - 35°C (50 - 95°F). The material can be stored at ambient temperature up to 40°C (104°F) for a period up to 6 months provided it is in unopened original packages and under dry and clean conditions. Material shelf life is affected by the storage conditions and extreme conditions influence the general material quality and performance.

Before use, material shall be conditioned indoors (production room) to reach ambient temperature. It is also recommended to ensure proper stock rotation by First In – First Out principle.

More information on storage is found in the Safety data sheet (SDS) / Product safety information sheet (PSIS) for this product.

#### Safety

Please see our "Safety data sheet" / "Product safety information sheet" for details on various aspects of safety of the product.

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**Issuer:**

Marketing Energy / Davide Vielmi  
Product Management / Wendy Loyens

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