

PRODUCT DATA SHEET

POLYETHYLENE

LE2270

LLD POLYETHYLENE FOR DRIP IRRIGATION EMITTING PIPES AND PLAIN LATERALS

DESCRIPTION

LE2270 is a natural, bimodal LLDPE offers excellent melt strength and processability for drip lateral extrusion. Product is specifically designed for the manufacture of drip laterals.

LE2270 has optimized weldability and high mechanical properties like, tensile strength, and elongation. It is produced with the proprietary Borstar® bimodal technology which provides the polymer very high ESCR and longer service life in agriculture.

CAS-No. 25087-34-7

APPLICATIONS

LE2270 is recommended for range of wall thickness drip irrigation tubing for online drip laterals and flat as well as cylindrical emitting pipe/inline production.

KEY FEATURES

LE2270 offers excellent balance of ESCR, process-ability and mechanical properties.

PHYSICAL PROPERTIES

| Property | Typical Value* | Test Method |
|----------------------------------|-----------------------|--------------|
| Density | 926 kg/m ³ | ASTM D 792 |
| Melt Flow Rate (190°C/2.16kg) | 0.22 g/10min | ASTM D1238 |
| Melting Temperature | 125 °C | ISO 11357/03 |
| Oxidation Induction Time (200°C) | ≥ 15 min | ISO 11357-6 |
| ESCR – 10% Igepal – F 50% | >5000 Hours | ASTM D1693-B |

* Typical properties and data should not be used for specification work

PROCESSING CONDITIONS

The actual extrusion conditions will depend on type of equipment used and the size and wall thickness of the pipe required. Following conditions should be used as a guide for starting up the extruder.

| | |
|-------------|-------------|
| Barrel zone | 180 – 210°C |
| Die zone | 190 – 210°C |

Please contact your local Borouge representative for specific recommendations for processing conditions.

STORAGE

This product should be stored in dry conditions at temperature below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and colour changes and can have negative effects on physical properties of this product.

More information on storage can be found in Safety Information Sheet (SIS) for this product.

SAFETY

LE2270 is not classified as a hazardous mixture.

Dust and fines from the product carry a risk of dust explosion. All equipment should be properly earthed. Inhalation of dust should be avoided as it may cause irritation of the respiratory system. Small amounts of fumes are generated during processing of the product. Proper ventilation is therefore required.

Please see our Safety Information Sheet (SIS) for details on various aspects of safety, recovery and disposal of the product, for more information contact your Borouge representative.

RECYCLING

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.

Safety Information Sheet
Statement on chemicals, regulations and standards
Statement on compliance to regulations for drinking water pipes

STANDARDS

Borouge is certified to various ISO standards, please refer to Borouge.com for more information.

DISCLAIMER

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