October 2016

Product Data Sheet

Polyethylene
Aquility™ LE2270

LLDPE for Drip Irrigation Emitting Pipes and Plain Laterals

DESCRIPTION

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

Aquility 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.

APPLICATIONS

Aquility 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.

SPECIAL FEATURES

Aquility LE2270 offers excellent balance of ESCR, processabilty and mechanical properties

PHYSICAL PROPERTIES

Property	Typical Value	Unit	Test Method
Density	926	Kg/m³	ASTM D 792
Melt Flow Rate MFR (190 °C/2.16 kg)	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 / F50	>5000	Hours	ASTM D 1693

*Data should not be used for specification work

PROCESSING GUIDELINES

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

Aquility LE2270 should be stored in dry conditions at temperatures below 50°C and protected from UV-light. Improper storage can initiate degradation, which results in odour generation and can have negative effects on the physical properties of the product.

SAFETY

Aquility LE2270 is not classified as a dangerous preparation.

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.

A Safety Information sheet is available on request. Please contact your Borouge representative for more details on various aspects of safety, recovery and disposal of the product.

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, SIS

Aquility is a trademark of the Borealis group

DISCLAIMER

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

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