



# RAMISLENE LLD9201S / LINEAR LOW DENSITY POLYETHYLENE LLDPE

#### **DESCRIPTION**

**RAMISLENE LLD9201S** is a butene linear low density polyethylene resin typically used for general purpose applications. Films produced from this resin are tough with good puncture resistance, high tensile strength and good hot tack properties. RAMISLENE LLD9201S is TNPP-free and does not contain slip and antiblock additives.

## **TYPICAL APPLICATIONS**

Shipping sacks, ice bags, frozen food bags, stretch wrap film, produce bags, liners, carrier bags, garbage bags, agricultural films, laminated and coextruded films for meat wrap, frozen food and other food packaging, shrink film (for blending with LDPE), industrial consumer packaging, and high clarity film applications if blended with (10 - 20%) LDPE.

# **TYPICAL PROPERTY VALUES**

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
POLYMER PROPERTIES			
Density	0.918	kg/m ₃	ASTM D1505
Melt Flow Rate			
at 190 °C and 2.16 kg	1.0	dg/ min	ISO 1133
FILM PROPERTIES			
Tear strength MD	170	kN/m	ISO 6383-2
Tensile test film			
Strength at Break MD	36.5	MPa	ASTM D882
Strength at Break TD	26.9	MPa	ASTM D882
Elongation at Break MD	580	%	ASTM D882
Elongation at Break TD	690	%	ASTM D882
Strength at Yield MD	10.7	MPa	ASTM D882
Strength at Yield TD	11.0	MPa	ASTM D882
Dart Impact	90	MPa	ASTM D1709
Tear strength TD	320	kN/m	ISO 6383-2
THERMAL PROPERTIES			
Vicat Softening Temperature			
at 10 N (VST [A)	102	°C	ASTM D1525
DSC test			
melting point	121	°C	RAMISLENE method

(1) Properties have been measured by producing 25 micronfilm with a 2.5:1 Blow-up Ratio



# RAMISLENE®

#### **ENVIRONMENT AND RECYCLING**

The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. RAMISLENE considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by RAMISLENE whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

#### **PROCESSING CONDITIONS**

Typical processing conditions for **RAMISLENE LLD9201S** are: Melt temperature: 195°C - 215°C,

Note: Film properties are based on 1.0 mil (25  $\mu$ m) thickness blown film produced with a 2.5:1 blow-up ratio at 12 lb/hr/in. die. Actual film properties may vary depending on operating conditions and additive packages. Film properties are not intended to be used as specifications.

Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm3.

Base density is the estimated density of the polymer if it did not contain any antiblock.

## **HEALTH, SAFETY AND FOOD CONTACT REGULATIONS**

Detailed information is provided in the relevant Material Safety Datasheet and or Standard Food Declaration, available via your local Sales Office.

DISCLAIMER: This product is not intended for and must not be used in any pharmaceutical/medical applications.

#### QUALITY

RAMISLENE is fully certified in accordance with the internationally accepted quality standard ISO 9001-20015.

#### STORAGE AND HANDLING

olyethylene resin should be stored in a manner to prevent a direct exposure to sunlight and/or heat. The storage area should also be dry and preferably do not exceed 50°C. RAMISLENE would not give warranty to bad storage conditions which may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process polyethylene resin within 6 months after delivery.

#### **DISCLAIMER**

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