LLDPE FILM

LL 0209 AA

LL 0209 AA* is a LLDPE copolymer with butene as comonomer which contains antioxidant. It is recommended for general purpose applications. It is suitable for blending with conventional LDPE.

Film made from pure LL 0209 AA has the following advantages over conventional LDPE:

- Better sealing, higher puncture resistance.
- Greater drawdown capability.
- Higher tensile strength.
- Higher puncture resistance.

Applications

- Heavy duty sacks.
- Produce bags.
- Stretch film.
- Agricultural films.
- Liners.

Typical Properties

Property/Grade	Test Method	Unit of measurement	Value
Melt flow rate (2.16 kg)	ISO 1133	g/10 min	0.9
Density	ISO 1872/1	Kg/m^3	920
Vicat softening T°	ISO R 306-74	C°	100
Tensile strength at yield MD/TD	ISO R 1184	MPa	10/11
Tensile strength at break MD/TD	ISO R 1184	MPa	41/32
Elongation at break MD/TD	ISO R 1184	%	620/840
Tear strength MD/TD	ASTMD 1922-67	g/25 mic	145/370
Dart impact strength	ASTMD 1709-75	g	150

Film properties were measured on 38 micron film extruded at a blow up ratio 2:1 with a melt temperature of 225° C.
* AA: Stabilization.

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Food Contact Plastics

Certificate of Conformity with the Requirements of EU Regulation 10/2011, as amended.

Certificate no: 2012/4666

Product name: LLDPE Resin; *'LL 0209 AA'*
Manufacturer: Sidi Kerir Petrochemicals Co. "SIDPEC"
Address: km 36 Alex-Cairo Desert Road, Alnahda, Alameria, Alexandria, EGYPT
Date of Issue: 7 February 2012
Pira Ref no: 07A12J3146/11A12J4763

Samples manufactured from the above resin have been tested for overall migration with the simulants and test conditions listed below.

	Test Conditions		
Food Simulants	**Duration**	**Temp/°C**	**Test**
Simulant A, B and D2	10 days	40°C	TI

TI = exposure to food simulant by total immersion.

The overall migration results obtained were found to be below the overall migration limits defined in EU Regulation 10/2011.

Additionally, Pira have carried out an audit of the formulation of the above product. All monomers and additives contained in the formulation are approved for use in food contact plastics and are listed in Annex I of EU Regulation 10/2011. None of these substance(s) is/are subject to restrictions (SML, QM or QMA) under this legislation.

The formulation of the above resin contains the following multiple function additive/s;

- Calcium salt of stearic acid, PM Ref 89040, CAS 57-11-4, FCM No 106, E470

(NB Multiple function additives are defined as those which are also approved for direct addition into foods and which would therefore be subject to separate food regulations).

The above resin can therefore be used to manufacture products which meet the requirements of EU Regulation 10/2011, as currently amended, for use with all classes of foodstuff for;

(a) any period (including periods over 6 months) at room temperature or below, and/or
(b) periods up to 2 hours at temperatures up to 70°C, and/or
(c) periods up to 15 minutes at temperatures up to 100°C.

The product therefore also meets the safety requirements laid out in Article III of EC Regulation 1935(2004) under the above conditions of use.

NB Users are reminded that EU Regulation 10/2011 relates to finished articles/materials manufactured from plastics. Users of the above products are responsible for ensuring that their finished products comply with the overall migration limit and any specific migration limit/s mentioned above, by conducting appropriate tests on their finished products.

Certified by: Dr Alistair Irvine
Principal Consultant, Food Packaging Safety