

NAME: LL0209KJ

Product Description:

LLDPE Film application.

LL0209KJ is a linear low density polyethylene copolymers containing butene-1 (C4) as the co-monomer. In lean blends, it offers the following advantages compared to Greater drawdown, improved hot-tack and lower seal shrinkage, better tear resistance, higher tensile stress and elongation at break.

LL0209KJ offers high slip film with easy opening properties when used pure in the thickness range 35 - 100 μ m. Addition of other polymers, master batches and pigments, or use of other thicknesses may alter film slip and anti-block performance. If corona treatment is necessary, the level should normally be in the range 38-48 mN/m. LL0209KJ are suitable for general purpose films, neat or in blends with LDPE and other.

Applications:

Ethylene polymers. Lean blend applications include sacks of all types, FFS and agricultural film.

Typical data: (Table)

Physical				
Melt flow rate		ISO 1133 Condition 4	0.9	g/10 min
Density (conditioning ISO 1872/1)		ISO 1183 Method D	921	kg/m ³
Vicat softening temperature		ISO 306 Method A	100	°C
Slip (erucamide)		INEOS Method	1175	ppm
Antiblock (silica)		INEOS Method	1425	ppm
Additives: antioxidants				
Dart drop impact	Method A	ASTM D 1709	140	g
Tensile stress @ yield	MD/TD	ISO 0527	10.Kas	Mpa
Tensile stress @ break	MD/TD	ISO 0527	41/32	Mpa
Elongation @ break	MD/TD	ISO 1184	620/840	%
1% Secant modulus	MD/TD	ISO 1184	195/205	Mpa
Elmendorf tear streng	MD/TD	ASTM D 1922	145/370	g/25 μ m
Coefficient of friction		ASTM D 1894	0.13	-
Haze		ASTM D 1003	12	%
Gloss (45°C)		ASTM D 2457	50	%%

Data should not be used for specification work

38 μ m film, 2.5:1 blow-up ratio, 225°C melt Extrusion conditions:

LL0209KJ in lean blends can be processed on most standard extrusion equipment.

Optimisation of conditions may be necessary, depending on the exact blend used.

LL0209KJ rich film formulations is often processed on modified LDPE machinery, but for the best performance the use of purposely designed LLDPE machinery is recommended.

Particular attention should be paid to maintaining a low melt temperature (<240°C), and an efficient bubble cooling system should be employed.

The recommended melt temperature range is 180 - 225°C.