

PRODUCT SPECIFICATION

Polyethylene Film and Bags - Low Density.

Low Density films are produced from a range of co-polymers of ethylene and n-butyl acrylate.

Film and Bags are produced in a variety of flow grades from low fractional melts, typically .3, through a full range up to melt flow index (MFI) 4.

Materials with a low MFI produce tougher, harder materials, ideal for sacks, damp proof course etc.

Mid-range materials are suitable for a wide range of applications, including shrink films, food packaging, refuse sacks and many others.

High Melt Indexes produce softer, finer film suitable for laundry films, garment covers and similar items.

Polythene films can be made surface treated (keyed) by corona discharge to enhance print adhesion and can be printed suitable for a variety of purposes including deep freeze, food packaging and outdoor usage.

All materials can be produced with or without slip and antiblock additives (oleamide and silica respectively)

GENERAL NOTES.

Low density Polythene films degrade very slowly under normal conditions. Ultra Violet radiation and excessive temperatures greatly increase degradation, therefore, materials should be stored avoiding direct sunlight and high temperatures.

Low density polythene is suitable for intimate contact with foodstuffs is non deleterious and when burnt does not give off toxic fumes. L.D.Pe 'Health & Safety' data sheets are available on request.

A relatively high level of static electricity builds up when polythene films are extruded, this is normally dealt with by static eliminators. However, should a lower level be required anti-static additives are available.

FILM PROPERTIES - PHYSICAL & OPTICAL

<u>Property</u>	<u>Test Method</u>	<u>Unit</u>	<u>Value</u>
Tensile Yield Stress MD/TD	ISO 1184	Mpa	12/11
Ultimate Tensile Stress MD/TD	ISO 1184	Mpa	28/17
Ultimate Elongation MD/TD	ISO 1184	%	200/650
Tear Resistance MD/TD	ISO 6383-2	kN/m	110/120
Dart Impact	ISO 7765-1	g	65
Coefficient of Friction MD	ISO 8295		<0.2
Haze	ASTM D 1003	%	8.0
Specular Gloss @ 45°	ASTM D 2457	%	60
Clarity	ASTM D 1746	Units	32

*Typical Average Values

Above properties based on material produced from a fully formulated 1.5 MFI feedstock into a 30 micron film at a temperature of 180°C and a blow ratio of 2:1

ADDITIVES.

A wide range of additives can be blended with Low Density polythene these include:-

Biodegraders, Photodegraders, Anti-static, Ultra violet inhibitors and absorbers, Anti-oxidants, Slip, Antiblock, Antislip, Matt finish, Infra red reflector, Flame retarders etc.

Colour pigments (masterbatches) can be readily added to low density polythene giving a diverse range of colours in a range of addition levels producing tints, translucent colours through to opaque colours.