

OREVAC® 18341

Linear low-density polyethylene tie resin for multi-purpose applications

DESCRIPTION

OREVAC® 18341 is a maleic anhydride modified linear low-density polyethylene. It is available in pellet form for use in conventional extrusion equipment designed to process polyolefin.

PROPERTIES

Characteristics	Typical Value	Unit	Test Method
Melt Index (190°C / 2.16 kg)	1.5	g/10min	ISO 1133 / ASTM D1238
Melting point	121	°C	ISO 11357-3
Density	0.918	g/cm ³	ISO 1183 / ASTM D1505
Vicat softening temperature (10N) ⁽¹⁾	95	°C	ISO 306 / ASTM D1525
Tensile modulus ⁽¹⁾	250	MPa	ISO 527 - 1A / ASTM D638
Elongation at break ⁽¹⁾	> 600	%	ISO 527 - 1A / ASTM D638
Tensile strength at break ⁽¹⁾	> 20	MPa	ISO 527 - 1A / ASTM D638
Hardness Shore D (1s/15s) ⁽¹⁾	55 / 45	-	ISO 868 / ASTM D2240

⁽¹⁾ On compression molded samples.

APPLICATIONS

OREVAC® 18341 has been designed to develop a reliable bonding strength between polyethylene or ethylene copolymers and mineral fillers such as aluminum trihydrate (ATH) or magnesium hydroxide (MDH). It is an effective coupling agent for halogen-free flame retardant compounds using high loadings of mineral fillers, such as compounds for insulation and sheathing of wires and cables.

OREVAC® 18341 can also be used as a tie layer in pipe-coating technology for multi-layer structures. It has been designed to develop a reliable bonding strength onto FBE (Fusion Bonded Epoxy) steel pipe protective layer.

In packaging market, **OREVAC® 18341** develops a reliable bonding strength in coextrusion processes between polyethylene and different materials (PA, EVOH ...). Containing a higher amount of grafted reactive functionalities compared to standard LLDPE based coextrusion tie resins, it can be used blended with other polyolefins.

For more detailed information and recommendations regarding your specific application, please contact your local ARKEMA technical representative.

OREVAC® 18341

PROCESSING

OREVAC® 18341 is suitable for the production of cable compounds with most common types of equipment (internal mixer, co-kneader, twin screw extruder).

When used for pipe coating technology, **OREVAC® 18341** is to be processed like a standard polyethylene resin. Typical extrusion temperature settings could be:

Zone 1	Zone 2	Zone 3	Zone 4	Exit	Fittings-Channels	Die
180 - 190°C	190 - 200°C	200 - 210°C	210 - 220°C	220 - 230°C	220 - 240°C	220 - 240°C

Final profile and settings depend on the line and the multi-layer structure being run.

STORAGE, HANDLING AND SAFETY

OREVAC® 18341 should be stored in dry conditions protected from UV-light. Improper storage conditions may cause degradation and have consequences on physical properties of the product.

Safety data sheet as well as information on handling and storage of **OREVAC® 18341** is available upon request to your ARKEMA representative.

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