

Polypropylene based tie resin for extrusion coating

Description

OREVAC® 18750 is a coextrusion coating adhesive based on a maleic anhydride modified polypropylene resin. It is available in pellet form for use in conventional extrusion and coextrusion equipment designed to process polyolefin.

Applications

OREVAC® 18750 is a tie resin to be used in extrusion coating and extrusion lamination technologies. It has been designed to develop adhesion in these processes onto substrates like aluminum foil (*), paper or PP films and in coextrusion with resins like PP and PA. OREVAC® 18750 exhibits excellent processing properties, particularly regarding drawability, neck-in and melt stability. In addition to adhesive properties, the special formulation of OREVAC® 18750 allows to design aluminum lids for PP or PP coated cups and containers with controlled opening forces.

(*) Adhesion performance to aluminum foil is strongly dependant on thermal conditions in the laminator. Standard conditions of coating onto cold aluminum foil require using a specific post heating treatment in which the OREVAC layer must be molten again.

Typical properties

Characteristics	Value	Unit	Test Method
Melt index (230°C / 2.16 kg)	35	g/10min	ISO 1133 / ASTM D1238
Melting point	160	°C	ISO 11357-3
Density	0.92	g/cm ³	ISO 1183 / ASTM D1505
Vicat softening point	121	°C	ISO 306 / ASTM D1525
Tensile modulus ⁽¹⁾	500	MPa	ISO 527-2 / ASTM D638
Tensile strength at yield ⁽¹⁾	16	MPa	ISO 527-2 / ASTM D638
Elongation at break ⁽¹⁾	>700	%	ISO 527-2 / ASTM D638

⁽¹⁾ Measured on 25 µm films

Processing

OREVAC® 18750 is not corrosive and is easily processed with standard polyolefin equipment. Conditions typically used in extrusion coating of polypropylene resins are suitable.

Extrusion temperature settings could be:

Zone 1	Zone 2	Zone 3	Zone 4	Fittings-Channels	Die
200-220°C	220-250°C	250-275°C	275 – 275°C	275°C	275°C

Final profile and settings depend on the line and the multi-layer structure being run. Although it is not necessary for short runs, it is recommended to dry OREVAC® 18750 pellets prior to extrusion in order to reduce die build-up during long runs. Typical drying conditions would be from 2 to 4 hours at 80-90°C under dry air.

Storage, handling and safety

OREVAC® 18750 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® 18750 is available upon request to your ARKEMA representative or at www.orevac.com.

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