

Maleic Anhydride modified Polypropylene

Description

OREVAC 18751 is a coextrusion coating adhesive based on a maleic anhydride modified polypropylene resin. It combines the processability of an extrusion coating resin with the thermal resistance of polypropylene. **OREVAC 18751** is available in pellet form for use in conventional extrusion and coextrusion equipment designed to process polyolefins.

Applications

OREVAC 18751 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 aluminium foil (*), paper or PP films and in coextrusion with resins like PP and PA. **OREVAC 18751** exhibits excellent processing properties, particularly regarding drawability, neck-in and melt stability. In addition to adhesive properties, the special formulation of **OREVAC 18751** allows to design aluminium lids for PP or PP coated cups and containers with controlled opening forces (**).

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

(**) Compared to the other extrusion coating grade OREVAC 18750, OREVAC 18751 is slightly more crystalline, leading to higher elastic modulus, higher yield strength and thus, higher opening forces in lids applications.

Typical characteristics

Characteristics	Value	Unit	Test Method
Melt index (230°C / 2,16 kg)	37	g/10mn	ISO 1133
Melting point	160	°C	DSC (internal)
Density	0.91	g/cm ³	ISO 1183
Vicat softening point	138	°C	ISO 306
Tensile strength at yield (1)	24	MPa	ISO R 527
Tensile modulus (1)	880	MPa	ISO R 527
Elongation at break (1)	500	%	ISO R 527

(1) Film properties

Processing

OREVAC 18751 is not corrosive and is easily processed with standard polyolefin equipment. Conditions typically used in extrusion coating of polypropylene resins are suitable.

Note: there is no difference in processing OREVAC 18751 compared to OREVAC 18750.

A standard temperature setting profile would be :

Extruder : 200 – 220 – 250 – 275 – 275 °C

Adapter pipe, feed-block and die : 275°C

Final profile and settings depend on the line and the multilayer structure being run. Although it is not necessary for short runs, it is recommended to dry OREVAC 18751 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.

Transitions from or to LDPE are easily achieved.

Storage and handling

OREVAC 18751 should be stored in dry conditions at temperature below 50°C and protected from UV-light. Improper storage conditions can cause degradation and have consequences on physical properties of the product.

Safety

Safety data sheet as well as information on handling and storage of **OREVAC 18751** are available upon request to your ARKEMA representative or at www.arkemagroup.com under heading FDS.

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