

OREVAC® 18751

Polypropylene based tie resin for extrusion coating

DESCRIPTION

OREVAC® 18751 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.

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	0.91	g/cm ³	ISO 1183 / ASTM D1505
Vicat softening point (10N)	138	°C	ISO 306 / ASTM D1525
Tensile modulus ⁽¹⁾	650	MPa	ISO 527-2 / ASTM D638
Tensile strength at yield ⁽¹⁾	22	MPa	ISO 527-2 / ASTM D638
Elongation at break ⁽¹⁾	500	%	ISO 527-2 / ASTM D638

⁽¹⁾ Measured on 25 µm films

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 aluminum 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 aluminum lids for PP or PP coated cups and containers with controlled opening forces (**).

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

(*) 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.

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

OREVAC®
BY ARKEMA

OREVAC® 18751

PROCESSING

OREVAC® 18751 is not corrosive and is readily 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°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® 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, HANDLING AND SAFETY

OREVAC® 18751 should be stored in dry conditions and 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® 18751** is available upon request to your ARKEMA representative or at orevac.com

SHELF LIFE

Two years from the date of delivery, in unopened packaging. For any use above this limit, please refer to our technical services.

April 2014

The products described in the brochure are not Medical grades designated for Medical Device applications. Arkema has implemented an internal Medical Policy regarding the use of Arkema products in Medical Devices applications that are in contact with the body or circulating bodily fluids. Arkema has designated Medical grades to be used for such Medical Device applications. Products that have not been designated as Medical grades are not authorized by Arkema for use in Medical Device applications that are in contact with the body or circulating bodily fluids. In addition, except for limited cases as determined by the Medical Device Policy, Arkema strictly prohibits the use of any Arkema products in Medical Device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days.

For any use of Arkema's product in Medical Device applications, please contact Arkema's sales network.

The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, ARKEMA expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

See MSDS for Health & Safety Considerations.

Arkema Functional Polyolefins
 420, rue d'Estienne d'Orves
 92705 Colombes Cedex - France
arkema.com — orevac.com

ARKEMA
 INNOVATIVE CHEMISTRY

ARKEMA - Société anonyme au capital de 614 937 940 euros - 445 074 885 RCS Nanterre