

Adhesive resin for pipe-coating technology

Description

OREVAC® 18410 is a maleic anhydride modified medium density polyethylene used in pipe coating technology for multilayer structures. It is available in pellet form for use in conventional extrusion and coextrusion equipment designed to process polyolefin.

Applications

OREVAC® 18410 has been designed to develop a reliable bonding strength onto FBE (Fusion Bonded Epoxy) steel pipe protective layer. It is mainly used as tie layer in three-layer polyethylene coatings (epoxy primer / adhesive / polyethylene), where mechanical and adhesive performances at high temperatures are required.

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

Typical properties

Characteristics	Value	Unit	Test Method
Melt index (190°C / 2.16 kg)	3.5	g/10min	ISO 1133 / ASTM D1238
Melting point	125	°C	ISO 11357-3
Density	0.930	g/cm ³	ISO 1183 / ASTM D1505
Vicat softening temperature (10N) ⁽¹⁾	110	°C	ISO 306 / ASTM D1525
Tensile modulus ⁽¹⁾	310	MPa	ISO 527-2 / ASTM D638
Tensile strength at break ⁽¹⁾	12.4	%	ISO 527-2 / ASTM D638
Elongation at break ⁽¹⁾	>600	MPa	ISO 527-2 / ASTM D638
Hardness shore D ⁽¹⁾	59	-	ISO 608 / ASTM D2240

⁽¹⁾ On compression molded samples.

Processing

OREVAC® 18410 is to be processed like a standard medium density polyethylene resin. Typical extrusion temperature settings could be:

Zone 1	Zone 2	Zone 3	Zone 4	Exit	Fittings-Channels	Die
190 – 200°C	200 – 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 multilayer structure being run.

Storage, handling and safety

OREVAC® 18410 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® 18410 is available upon request to your ARKEMA representative or at www.orevac.com.

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