SK functional polymer

Technical Data Sheet

OREVAC® 18302N

OREVAC® 18302N is a maleic anhydride grafted linear low-density polyethylene.

- OREVAC® 18302N has been designed to develop a reliable bonding strength in coextrusion processes between polyethylene or ethylene copolymers and different materials among which polyamides and EVOH.
- OREVAC® 18302N is also recommended in non-halogen flame retardant cable compounds using high loadings of mineral fillers which require outstanding mechanical properties such as high tensile strength at break and good elongation and good chemical resistance.

Typical Properties

	Test Method	Unit	Typical Value
Melt Index (190°C/2.16kg)	ISO 1133 / ASTM D1238	g/10min.	1.5
Melting Point	ISO 11357-3	°C	123
Vicat Softening Temperature (10N)[1]	ISO 306 / ASTM D1525	°C	84
Density	ISO 1183 / ASTM D1505	g/cm^3	0.91
Tensile strength at yield[1]	ISO 527-2 / ASTM D638	MPa	7
Elongation at break[1]	ISO 527-2 / ASTM D638	%	790
Tensile strength at break[1]	ISO 527-2 / ASTM D638	MPa	20

[1]: On compression molded samples.

Processing

OREVAC® 18302N is to be processed like a standard medium density polyethylene resin. It can be processed within different extrusion and coextrusion technologies including blown film, blow moulding and tube coextrusion. Temperature settings have a major influence on adhesion development. Therefore, it is recommended to process OREVAC® 18302N at the minimum melt temperature of 210°C.

Typical extrusion temperature settings could be:

Zone 1	Zone 2	Zone 3	Zone 4	Exit	Fittings-Channels	Die
160-180°C	180-200°C	200-220°C	210-230°C	215-230°C	220-230°C	220-240°C

For the production of cable compounds, OREVAC® 18302N is suitable with the most common types of equipment (internal mixers, Buss® kneader, twin screw extruders); it provides an effective coupling between the base polymers (EVATANE®, LOTRYL®, various polyolefins) and the mineral fillers (ATH, MDH).

Storage, Handling & Safety

OREVAC® 18302N 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.