

OREVAC® 18302N

Linear low-density polyethylene based tie resin for multi-layer coextrusion

DESCRIPTION

OREVAC® 18302N is a maleic anhydride modified low-density polyethylene available in pellet form. It can be processed on most extrusion equipments designed to process conventional polyolefin.

TYPICAL PROPERTIES

| Characteristics | Value | Unit | Test Method |
|--|-------|-------------------|-----------------------|
| Melt Index (190°C / 2.16 kg) | 1.5 | g/10min | ISO 1133 / ASTM D1238 |
| Melting temperature | 123 | °C | ISO 11357-3 |
| Density | 0.912 | g/cm ³ | ISO 1183 / ASTM D1505 |
| Vicat softening temperature (10N) ⁽¹⁾ | 84 | °C | ISO 306 / ASTM D1525 |
| Tensile strength at yield ⁽¹⁾ | 7 | MPa | ISO 527-2 / ASTM D638 |
| Elongation at break ⁽¹⁾ | 790 | % | ISO 527-2 / ASTM D638 |
| Tensile strength at break ⁽¹⁾ | 20 | MPa | ISO 527-2 / ASTM D638 |

⁽¹⁾ On compression molded samples.

APPLICATIONS

OREVAC® 18302N has been designed to develop a reliable bonding strength between polyethylene or most ethylene copolymers and many kinds of 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 – high tensile strength at break and good elongation and good chemical resistance.

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

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. As a consequence, we recommend processing **OREVAC® 18302N** at the minimum melt temperature of 210°C.

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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 AND 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. Safety data sheet as well as information on handling and storage of **OREVAC® 18302N** is available upon request to your ARKEMA representative or on the web site 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.

January 2019

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