

# OREVAC® 18410/18342N

## High-density polyethylene based tie resin for pipe-coating

### DESCRIPTION

OREVAC® 18410/18342N is a maleic anhydride modified high-density polyethylene used in pipe-coating technology for multi-layer structures. It is available in pellet form for use in conventional extrusion equipment designed to process polyolefin.

### 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 <sup>3</sup>	ISO 1183 / ASTM D1505
Vicat softening temperature (10N) <sup>(1)</sup>	110	°C	ISO 306 / ASTM D1525
Tensile modulus <sup>(1)</sup>	310	MPa	ISO 527 - 2 / ASTM D638
Elongation at break <sup>(1)</sup>	> 600	%	ISO 527 - 2 / ASTM D638
Tensile strength at break <sup>(1)</sup>	> 20	MPa	ISO 527 - 2 / ASTM D638
Hardness Shore D <sup>(1)</sup>	59	-	ISO 868 / ASTM D2240

<sup>(1)</sup> On compression molded samples.

### APPLICATIONS

OREVAC® 18410/18342N 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 high-density 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.

# OREVAC® 18410/18342N

## PROCESSING

OREVAC® 18410/18342N is to be processed like a standard 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 multi-layer structure being run.

## STORAGE, HANDLING AND SAFETY

OREVAC® 18410/18342N 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® 18410/18342N is available upon request to your ARKEMA representative or at [orevac.com](http://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 2016

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, EXPRESSED 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 SDS for Health & Safety Considerations. Arkema has implemented a Medical Policy regarding the use of Arkema products in Medical Devices applications that are in contact with the body or circulating bodily fluids:

<http://www.arkema.com/en/social-responsibility/responsible-product-management/medical-devicepolicy/index.html>

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, 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. The Arkema trademarks and the Arkema name shall not be used in conjunction with customers' medical devices, including without limitation, permanent or temporary implantable devices, and customers shall not represent to anyone else, that Arkema allows, endorses or permits the use of Arkema products in such medical devices.

It is the sole responsibility of the manufacturer of the medical device to determine the suitability (including biocompatibility) of all raw materials, products and components, including any medical grade Arkema products, in order to ensure that the final end-use product is safe for its end use; performs or functions as intended; and complies with all applicable legal and regulatory requirements (FDA or other national drug agencies) It is the sole responsibility of the manufacturer of the medical device to conduct all necessary tests and inspections and to evaluate the medical device under actual end-use requirements and to adequately advise and warn purchasers, users, and/or learned intermediaries (such as physicians) of pertinent risks and fulfill any post market surveillance obligations. Any decision regarding the appropriateness of a particular Arkema material in a particular medical device should be based on the judgment of the manufacturer, seller, the competent authority, and the treating physician.