# SABIC® LDPE 1965N0

LOW DENSITY POLYETHYLENE

## DESCRIPTION

SABIC® LDPE 1965N0 is an additive free standard CTR® tubular grade with a high flow rate for masterbatch. This grade has a high filler acceptance.

Application
SABIC® LDPE 1965N0 is a masterbatch grade typically used for injection moulding applications, where high filler acceptance and good flow properties are required.

This product is not intended for and must not be used in any pharmaceutical/medical applications.

## TYPICAL PROPERTY VALUES

Revision 20210414

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| **POLYMER PROPERTIES** | | | |
| **Melt Flow Rate (MFR)** | | | |
| at 190 °C and 5 kg | 205 | dg/min | ISO 1133 |
| at 190 °C and 2.16 kg | 65 | dg/min | ISO 1133 |
| **Melt volume rate (MVR)** | | | |
| at 190 °C and 5 kg | 270 | ml/10 min | ISO 1133 |
| at 190 °C and 2.16 kg | 85 | ml/10 min | ISO 1133 |
| **Density** | 919 | kg/m³ | ASTM D1505 |
| **MECHANICAL PROPERTIES** | | | |
| **Tensile test** [1] [2] | | | |
| stress at break | 7 | MPa | ISO 527-2 |
| tensile modulus | 165 | MPa | ISO 527-2 |
| strain at break | 150 | % | ISO 527-2 |
| stress at yield | 8 | MPa | ISO 527-2 |
| **Creep modulus** [3] [4] | | | |
| after 1000 hours | 35 | MPa | ISO 899 |
| after 1 hour | 70 | MPa | ISO 899 |
| **Izod impact notched** | | | |
| at 23 °C | 40 | kJ/m² | ISO 180/A |
| at -30 °C | 5.0 | kJ/m² | ISO 180/A |
| **Hardness Shore D** | 40 | - | ISO 868 |
| **THERMAL PROPERTIES** | | | |
| **Heat deflection temperature** [5] | | | |
| at 1.80 MPa (HDT/A) | 40 | °C | ISO 75-2 |
| **Vicat Softening Temperature** | | | |
| at 10 N (VST/A) | 75 | °C | ISO 306 |
| **DSC test** | | | |
| melting point | 104 | °C | DIN 53765 |
| enthalpy change | 100 | J/g | DIN 53765 |

(1) Test specimen according to ISO 527-2 type 1BA, thickness 2 mm
(2) Speed of testing: 50 mm/min
(3) Test specimen according to ISO 3167, thickness 4 mm
(4) Determined at 23 °C, 3 MPa
(5) Conditioning of test specimen: temp. 23 °C, relative humidity 50 %, 24 hours

## ENVIRONMENT AND RECYCLING

The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.

## STORAGE AND HANDLING

Polyethylenes resins (in pelletised or powder form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 50 °C. Not complying with these precautionary measures can lead to a degradation of the product which can result in colour changes, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in pelletised or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.

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