# SABIC® LDPE 2200H0

LOW DENSITY POLYETHYLENE

## DESCRIPTION

SABIC® LDPE 2200H0 is a grade with a low melt flow range and contains no additives. This grade has a good draw down ability and very good optical properties.

Application
SABIC® LDPE 2200H0 is typically used for thin film applications combining high strength and good optical properties.

Film properties
Film properties have been measured at film of 50 µm with a BUR of 3.
The film has been produced on Kiefel IBC blown film line with 200 kg/h. Die size 200 mm, die gap 0.8 mm.

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

## TYPICAL PROPERTY VALUES

Revision 20180807

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|---|---|---|
| **POLYMER PROPERTIES** | | | |
| **Melt Flow Rate (MFR)** | | | |
| at 190 °C and 2.16 kg | 0.33 | dg/min | ISO 1133 |
| **Density** | 922 | kg/m³ | ASTM D1505 |
| **OPTICAL PROPERTIES** | | | |
| **Gloss (45°)** | 57 | ‰ | ASTM D2457 |
| **Haze** | 8 | % | ASTM D1003 |
| **FILM PROPERTIES** | | | |
| **Impact strength** | 30 | kJ/m | ASTM D4272 |
| **Tear strength TD** | 40 | kN/m | ISO 6383-2 |
| **Tear strength MD** | 35 | kN/m | ISO 6383-2 |
| **Tensile test film** | | | |
| Yield stress TD | 11 | MPa | ISO 527-3 |
| Stress at break TD | 22 | MPa | ISO 527-3 |
| Modulus of elasticity TD | 190 | MPa | ISO 527-3 |
| Stress at break MD | 27 | MPa | ISO 527-3 |
| **Tensile test film** | | | |
| Strain at break MD | >200 | % | ISO 527-3 |
| Strain at break TD | >500 | % | ISO 527-3 |
| **Coefficient of friction** | 1.0 | - | ASTM D1894 |
| **Blocking** | 30 | g | SABIC method |
| **Re-blocking** | 10 | g | SABIC method |
| **THERMAL PROPERTIES** | | | |
| **Vicat Softening Temperature** | | | |
| at 10 N (VST/A) | 98 | °C | ISO 306 |

## 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.

## DISCLAIMER