

High Density Polyethylene IG58

Description:

IG58 is a High Density Polyethylene produced for injection molding applications. It offers high stiffness, impact strength and high output (fast cycle).

Application:

Thin-wall articles, housewares, ice cream packaging, food and general purpose containers.

Control Properties:

| | ASTM Methods | Units | Values |
|---------------------------|--------------|-------------------|--------|
| Melt Flow Rate (190/2.16) | D 1238 | g/10 min | 50 |
| Density | D 792 | g/cm ³ | 0.956 |

Typical Properties:

Plaque Properties^a

| | ASTM Methods | Units | Values |
|--|--------------|-------|--------|
| Tensile Strength at Yield | D 638 | MPa | - |
| Tensile Strength at Break | D 638 | MPa | 27 |
| Flexural Modulus – 1% Secant | D 790 | MPa | 1150 |
| Shore D Hardness | D 2240 | - | 61 |
| Notched Izod Impact Strength | D 256 | J/m | 25 |
| Vicat Softening Temperature at 10 N | D 1525 | °C | 125 |
| Deflection Temperature under Load at 0.455 MPa | D 648 | °C | 66 |

(a) Test specimens prepared from compression molded sheet made according to ASTM D 4703.

Recommended Processing Conditions:

IG 58 has been developed for injection molding under conditions comparable to High Density Polyethylene of similar Melt Flow Index.

Recommended temperature profile: 160 to 230°C.

Final Remarks:

1. This resin meets the requirements for olefin polymers as defined in 21 CFR, section 177.1520 issued by FDA – Food and Drug Administration in force on the date of publication of this specification. The additives present are covered in appropriate regulation by FDA.
2. The information presented in this Data Sheet reflects typical values obtained in our laboratories, but should not be considered as absolute or as warranted values. Only the properties and values mentioned on the Certificate of Quality are considered as guarantee of the product.
3. In some applications, Braskem has developed tailor-made resins to reach specific requirements.
4. In case of doubt regarding utilization, or for other applications, please contact our Application Engineering.
5. For information about safety, handling, individual protection, first aids and waste disposal, please see MSDS. CAS Registry number: 25087-34-7.
6. The mentioned values in this report can be changed at any moment without Braskem previous communication.
7. Braskem does not recommend this grade for packages, parts or any kind of product manufacture that will be used for storage or contact with solution that will have internal contact with human body.
8. The content of this Data Sheet replaces previous revisions published for this product.
9. This resin does not contain the substance Bisphenol A (BPA, CAS # No. 80-05-7) in its composition.