Provisional Technical Datasheet





High Density Polyethylene

Product Description:

HDPE B6003 is a natural colored grade produced with the latest Mitsui CX slurry polymerization Technology exhibiting following features:

- ✓ Very Good Processing Properties
- ✓ High Rigidity
- ✓ Excellent Mechanical properties

HDPE B6003 is recommended for following applications:

- ✓ General purpose containers up to 20 L
- ✓ Lubricant oil containers (up to 15 L)
- ✓ Edible Oil containers (up to 15 L)
- ✓ Bottles for food, milk packaging

| Properties | Test Method | Units | Values* |
|---|--|--|---|
| Properties | | | |
| Melt Flow Index (190°C & 2.16 kg) | ASTM D1238 | g / 10 min | 0.35 |
| Density (at 23 ⁰ C) | ASTM D1505 | gm/cm ³ | 0.962 |
| cal Properties | | | |
| Tensile Strength @ Yield (50mm / min) | ASTM D638 | MPa | 32 |
| Elongation @ Break (50mm / min) | ASTM D638 | % | >500 |
| Notched Izod Impact Strength (at 23 ⁰ C) | ASTM D256A | J/m | 350 |
| Flexural Modulus | ASTM D790A | Мра | 1300 |
| Hardness | ASTM D2240 | Shore D | 68 |
| Properties | | | |
| Vicat Softening Point | ASTM D1525 | °C | 129 |
| Heat Deflection Temperature | ASTM D648 | ٥C | 80 |
| | Properties Melt Flow Index (190°C & 2.16 kg) Density (at 23 °C) cal Properties Tensile Strength @ Yield (50mm / min) Elongation @ Break (50mm / min) Notched Izod Impact Strength (at 23 °C) Flexural Modulus Hardness Properties Vicat Softening Point | PropertiesMelt Flow Index (190°C & 2.16 kg)ASTM D1238Density (at 23 °C)ASTM D1505cal PropertiesASTM D638Tensile Strength @ Yield (50mm / min)ASTM D638Elongation @ Break (50mm / min)ASTM D638Notched Izod Impact Strength (at 23 °C)ASTM D256AFlexural ModulusASTM D790AHardnessASTM D2240PropertiesVicat Softening PointVicat Softening PointASTM D1525 | PropertiesMelt Flow Index (190°C & 2.16 kg)ASTM D1238g / 10 minDensity (at 23 °C)ASTM D1505gm/cm³cal PropertiesTensile Strength @ Yield (50mm / min)ASTM D638MPaElongation @ Break (50mm / min)ASTM D638%Notched Izod Impact Strength (at 23 °C)ASTM D256AJ/mFlexural ModulusASTM D790AMpaHardnessASTM D2240Shore DPropertiesVicat Softening PointASTM D1525°C |

* Mechanical Properties tested on Compression Molded Specimen.

* Typical Values and not to be taken as specification limits, values may change without any prior notice.

Recommended Processing Temperature: 160 – 200 °C

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Contact: ONGC Petro Additions Ltd., Polymer Marketing Group: 1st Floor, Omkara Complex, Sai Chowkdi, Manjalpur, Vadodara 390011, Gujarat,India Telephone: +91 265 6192600, Fax: +91 265 6192666, Corporate Site: <u>www.opalindia.in</u> PARC/2016/03 - 00

Typical Properties:

Blow Molding





Regulatory Requirements:

HDPE Blow Molding grade B6003 shall meet the requirements stipulated in IS 10146:1982 on 'Specification of Polyethylene for safe use in contact with Foodstuff, Pharmaceutical & Drinking water'. The grade and Additives incorporated in this grade shall meet the positive list of constituents as prescribed in IS 10141:1982. The Grade and the additives incorporated in it shall also comply with the FDA: CFR Title 21,177.1520, Olefin Polymers.

Storage & Handling:

Prevent Polyethylene Material from direct exposure to sunlight & heat to avoid quality deterioration. The storage location should be dry, dust free and the Storage temperature should not exceed 50 °C. Non - compliance to these precautionary measures can lead to degradation of the product causing Color changes, Odor & inadequate product performance.

Health and Safety Information:

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The Material Safety Data Sheet (MSDS) contains the available product health and safety information for this material and can be found at **www.opalindia.in**. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.



ONGC Petro additions Ltd

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