


**Technical Data Sheet**  
 Rev 04 (December/17)

## High Density Polyethylene HDB6050U1

**Description:**

HDB6050U1 is a high molecular weight copolymer and UV stabilized grade developed for the production of medium to large blow molded articles. Provides excellent processability, good rigidity, outstanding chemical resistance, high impact strength and high ESCR.

**Applications:**

High performance blow molded containers typically 20 - 240 liters (5.3 – 63.4 gallons) capacity for packaging aggressive products.

**Process:**

Blow Molding

**Control Properties:**

|                               | Test Methods | Units             | Values |
|-------------------------------|--------------|-------------------|--------|
| Melt Flow Rate (190°C/21.6Kg) | ASTM D 1238  | g/10min           | 5.00   |
| Density                       | ASTM D 792   | kg/m <sup>3</sup> | 0.948  |

**Typical Properties<sup>1</sup>:**

|                                                 | Test Methods | Units             | Values |
|-------------------------------------------------|--------------|-------------------|--------|
| Tensile Strength at Yield                       | ASTM D 638   | MPa               | 26     |
| Elongation at break                             | ASTM D 638   | %                 | >650   |
| Tensile Strength at break                       | ASTM D 638   | MPa               | 45     |
| Tensile Modulus of Elasticity, Secant 1% Method | ASTM D 638   | MPa               | 1073   |
| Flexural Modulus, Secant 1% Method              | ASTM D 790   | MPa               | 1133   |
| Izod Impact Strength <sup>2</sup>               | ASTM D 256   | J/m               | >500   |
| Charpy Impact Strength <sup>2</sup>             | ISO 179-1EA  | KJ/m <sup>2</sup> | >22    |
| ESCR <sup>3</sup> , 10% Igepal                  | ASTM D 1693  | h                 | 360    |
| ESCR <sup>3</sup> , 100% Igepal                 | ASTM D 1693  | h                 | >1000  |

1 Test specimens from compression molded plaque according to ASTM D4703.

2 Test temperature 23°C

3 Condition B

**Final Observations:**

- The information in this document is provided in good faith and reflects typical values obtained in our laboratories and should not be considered as absolute nor warranted. Only the properties and values mentioned on the Certificate of Quality are considered as product warranty.
- In some applications, Braskem IDESA has developed resins well-tailored to meet specific requirements.
- In case of doubts regarding our product use or for other applications, please contact our Braskem IDESA technical services [serviciotecnico@braskem.com](mailto:serviciotecnico@braskem.com)
- For information about safety, handling, individual protection equipment, first aid and disposal, consult the Safety Data Sheet (SDS) or please contact our Braskem IDESA safety team [product.safety@braskem.com](mailto:product.safety@braskem.com). CAS Number: 25213-02-9.
- The values reported in this document may change without Braskem IDESA previous communication.
- Braskem IDESA does not recommend the use of this product for the manufacture of packages, parts or any other product used for storage or contact with parenteral solution nor with the inside of the human body.
- This resin does not contain the substance Bisphenol A (BPA, CAS#80-05-7) in its composition.
- The content of this Product Data Sheet replaces the one issued previously.