

## High Density Polyethylene HDB8550

### Description:

HDB8550 is a natural high-density polyethylene copolymer designed for blow molding applications with excellent impact strength and high Environmental Stress Cracking Resistance (ESCR).

### Applications:

Blow molding of large volume containers, Drums, Jerrycans

### Processes:

Extrusion Blow Molding

### Control Properties:

| Feature                       | Method     | Units             | Values |
|-------------------------------|------------|-------------------|--------|
| Melt Flow Rate (190°C/21.6kg) | ASTM D1238 | g/10 min          | 8      |
| Density                       | ASTM D792  | g/cm <sup>3</sup> | 0.949  |

### Typical Properties<sup>1</sup>

| Feature                               | Method       | Units | Values |
|---------------------------------------|--------------|-------|--------|
| Tensile Strength at Yield             | ASTM D 638   | MPa   | 24     |
| Tensile Strength at Break             | ASTM D 638   | MPa   | 35     |
| Strain at Yield                       | ASTM D 638   | %     | 7      |
| Strain at Break                       | ASTM D 638   | %     | 545    |
| Elasticity Modulus (Secant 1%)        | ASTM D 638   | MPa   | 1105   |
| Flexural Modulus (Secant 1%)          | ASTM D 790   | MPa   | 1213   |
| Izod Impact Strength <sup>3</sup>     | ASTM D 256/A | J/m   | 500    |
| Oxidative Induction Time (OIT, 200°C) | ASTM D 3895  | min   | 120    |
| ESCR (10% Igepal) <sup>2</sup>        | ASTM D 1693  | h     | >1000  |
| ESCR (100% Igepal) <sup>2</sup>       | ASTM D 1693  | h     | >1000  |

<sup>1</sup> Test specimens from compression molded plaque according to ASTM D4703.

<sup>2</sup> Condition B.

<sup>3</sup> Test temperature at 23°C.

### Final Remarks

- 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 application, Braskem IDESA has developed resins well-tailored to meet specific requirements.
- In case of doubts regarding our product use for other applications, please contact our Braskem IDESA technical services [serviciostecnicos@braskem.com](mailto:serviciostecnicos@braskem.com)
- For information about safety, handling, individual protection equipment, first aid 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:2513-02-9
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