

## Adflex Q 302 B

### Advanced Polyolefin

#### Product Description

Adflex Q 302 B is a reactor TPO (thermoplastic polyolefin) manufactured using LyondellBasell's proprietary *Catalloy* process technology. It is an innovative material that resists gas fading and brings a warm and sensual feel, creating a truly unique sensation.

Part of a family of polymers with a soft, velvety texture, Adflex Q 302 B resin enables packagers to give their products a distinct edge over conventional plastics. Bottles blow molded from Adflex Q 302 B resin conveys an upscale, quality image that enhances point of purchase appeal. The unique texture is also ideal for applications requiring a no-slip surface, such as shower soaps and lotions.

For regulatory compliance information, see the Adflex Q 302 B Product Stewardship Bulletin (PSB).

#### Product Characteristics

|                                      |  |
|--------------------------------------|--|
| <b>Status</b>                        | Commercial: Active   |
| <b>Test Method used</b>              | ISO  |
| <b>Processing Methods</b>            | Extrusion Blow Molding, Injection Blow Molding   |
| <b>Features</b>                      | Good Chemical Resistance, High ESCR (Environmental Stress Cracking Resistance), Gas-fading Resistant, High Heat Resistance , Good Puncture Resistance , Recyclable Material, High Strength , Good Surface Finish |
| <b>Typical Customer Applications</b> | Blow Moulding Applications, Sports, Leisure and Toys   |

| Typical Properties                                    | Method              | Value | Unit              |
|---|---------------------|-------|-------------------|
| <b>Physical</b>                                       |                     |       |                   |
| Density (Method A)                                    | ISO 1183            | 0.88  | g/cm <sup>3</sup> |
| Melt flow rate (MFR) (230 °C/ 2.16 kg)                | ISO 1133            | 0.9   | g/10 min          |
| <b>Mechanical</b>                                     |                     |       |                   |
| Tensile Stress at Break (°C)                          | ISO 527-1, -2       | 9.5   | MPa               |
| Tensile Stress at Yield (23 °C)                       | ISO 527-1, -2       | 8.5   | MPa               |
| Tensile Strain at Break                               | ISO 527-1, -2       | >500  | %                 |
| Tensile Strain at Yield                               | ISO 527-1, -2       | 37    | %                 |
| Flexural modulus (23 °C)                              | ISO 178             | 350   | MPa               |
| <b>Impact</b>   |                     |       |                   |
| Notched izod impact strength (23 °C, Type 1, Notch A) | ISO 180             | 47    | kJ/m <sup>2</sup> |
| <b>Hardness</b>                                       |                     |       |                   |
| Shore hardness D                                      | ISO 868/ASTM D 2240 | 47    |                   |
| Note: 15 seconds                                      |                     |       |                   |

#### Notes

Typical properties; not to be construed as specifications.

