

HDPE ALCUDIA[®] 5503

DESCRIPTION

ALCUDIA[®] 5503 is a high-density polyethylene copolymer of hexene, with high molecular weight. It is specially designed to make, by blow molding-extrusion, containers for liquid detergents and chemicals. This grade contains stabilizers according to the end use of the item in order to reinforce the thermal stability.

Good mechanical properties and excellent level of both stiffness and environmental stress cracking resistance can be obtained with ALCUDIA[®] 5503 due to its molecular weight and density.

TYPICAL APPLICATIONS

Packaging of non-aggressive liquid detergents and chemicals.

Recommended melt temperature range from 180 to 200°C. Processing conditions should be optimized for each production line.

| PROPERTIES | VALUE * | UNIT | TEST METHOD |
|---|---------|-------------------|-----------------|
| General | | | |
| Melt Flow Rate (190°C, 2.16 kg) | 0.25 | g/10 min | ISO 1133 |
| Melt Flow Rate (190°C, 21.6 kg) | 25.0 | g/10 min | ISO 1133 |
| Density at 23°C | 955 | kg/m ³ | ISO 1183 |
| Mechanical | | | |
| Tensile Strength at Break | 28 | MPa | ISO 527-2 |
| Elongation at break | 700 | % | ISO 527-2 |
| Flexural modulus of elasticity | 1200 | MPa | ISO 178 |
| Other | | | |
| Vicat Softening Temperature (10 N) | 128 | °C | ISO 306 |
| Shore Hardness D | 65 | ° | ISO 868 |
| Environmental Stress Cracking Resistance (F ₅₀) | 100 | h | ASTM D-1693 (1) |

* Typical values – Not to be considered as specification
(1) 10% Igepal, 50°C

ALCUDIA[®] 5503 complies with the European Directives regarding materials intended for contact with foodstuffs. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

STORAGE

ALCUDIA[®] 5503 should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60°C and protected from UV radiation. Storage under inappropriate conditions could initiate degradation processes which may have a negative influence on the processability and the properties of the transformed product.

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