

Technical Data Sheet : KeyForm H0401

High Density Polyethylene

Product Description

The grade is a high density polyethylene resin used in small blow molding applications such as thin wall packaging, consumer goods and toys. It exhibits a very good combination of high stiffness and high stress cracking resistance. Delivered in pellet form, demonstrates good organoleptic properties, contains antioxidants and has a broad molecular weight distribution.

Information regarding regulatory status, including supported, prohibited, or restricted applications, is provided in the **Product Regulatory Summary** and the **Safety Data Sheet (SDS)**.

General

Application	Bottles For Consumer Goods; Bottles for Industrial Use; Jerry Cans; Sports, Leisure & Toys
Market	Consumer Products; Industrial Packaging; Rigid Packaging
Processing Method	Extrusion Blow Molding
Attribute	Antioxidant; High ESCR (Environmental Stress Cracking Resistance); High Rigidity
Internal ref. number	1Q125, BEN7770
Revision	Version 1.1 ; June 2026

Properties.

Typical Properties	Value ^{*)}	Nominal Units	Test Method
Physical			
Melt Flow Rate			
(190 °C/2.16 kg)	0.30	g/10 min	ISO 1133-1
(190 °C/5.0 kg)	1.2	g/10 min	ISO 1133-1
(190 °C/21.6 kg)	22	g/10 min	ISO 1133-1
Density	0.958	g/cm ³	ISO 1183-1
Bulk Density	>0.500	g/cm ³	ISO 60
Mechanical			
Tensile Modulus	1350	MPa	ISO 527-1, -2
Tensile Stress at Yield	28	MPa	ISO 527-1, -2
Tensile Strain at Yield	7	%	ISO 527-1, -2
Environmental Stress Crack Resistance, F ₅₀ (Note: Cond. B, 10% Arkopal N100)	150	hr	ASTM D1693
FNCT			
(6.0 MPa, 2% Arkopal N100, 50 °C)	20	hr	ISO 16770
(6.0 MPa, 6.6% Dehyton PL, 50 °C)	20	hr	ISO 16770
Impact			
Charpy Impact Strength - Notched, (-30 °C, Type 1, Edgewise, Notch A)	6.5	kJ/m ²	ISO 179
Tensile Impact Strength (Note: notched, -30°C)	75	kJ/m ²	ISO 8256
Hardness			
Shore Hardness, (Shore D)	64		ISO 868

Ball Indentation Hardness, (H 132/30)	60	MPa	ISO 2039-1
Processing Parameters			
Melt Temperature	180 - 210	°C	

*) These are typical property values not to be construed as specification limits.

Processing Techniques

Users should determine the conditions necessary to obtain optimum product properties and suitability of the product for the intended application.

In cases where higher temperatures are required, please contact your appropriate technical contact for support.

Company Information

For further information regarding the Velogy, please visit <http://www.velogy.com>
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