REPSOL HEALTHCARE® HHD55G

HHD55G is a high density polyethylene copolymer of hexane with high molecular weight. It is specially designed to make containers of small and medium capacity by extrusion blow moulding. This grade contains stabilizers according to the end-use of the item in order to reinforce the thermal and light stability.

Good mechanical properties and excellent level of both stiffness end environmental stress cracking resistance can be obtained with REPSOL Healthcare HHD55G due to its molecular weight and density.

TYPICAL APPLICATIONS

Pharmaceutical packaging and healthcare applications.

Recommended melt temperature range from 180 to 200ºC. Processing conditions should be optimised 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 ºC; 21.6 kg)	25.0	g/10 min	ISO 1133
Density at 23ºC	955	kg/m^3	ISO 1183
Tensile Strength at Break	28	MPa	ISO 572-2
Elongation at Break	700	%	ISO 572-2
Flexural Modulus of Elasticity	1200	MPa	ISO 178
Other			
Vicat Softening Temperature (10N)	128	ºC	ISO 306
Shore Hardness D	65	º	ISO 868
Environmental Stress Cracking Resistance (F50)	100	h	ASTM D-1693 (1)

(1) 10% Igepal, 50ºC

Repsol Healthcare® HHD55G complies with EP 3.1.3 and EP 3.1.5, USP 88 class VI Biocompatibility and ISO 10993-4, ISO 10993-5, ISO 10993-10, ISO 10993-11. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

STORAGE

HHD55G should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60ºC 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.

***This product(s) may not be used in:**

(i) **any U.S. FDA Class I and/or European Union Class I Medical Devices (Non-invasive devices), without prior notification to Seller for each specific product and application**

(ii) **the manufacture of any of the following, without prior written approval by Seller for each specific product and application: U.S. FDA Class II and/or European Union Class II Medical Devices:**

Category IIa: Invasive devices with limited risk: e.g. syringes, lancets, insulin pens.

Category IIb: Invasive devices with higher risk: e.g. pouches for dialysis processes.

(iii) **in U.S. FDA Class III, and/or European Class III Medical Devices; Category III: Very high risk devices: long-term (> 29 days) or permanent implants, long term (> 29 days) applications in direct contact with any body part or any body fluid.**

***Repsol** makes no warranties, express or implied, which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose

***Repsol** accepts no liability from the use of Repsol products in conjunction with other materials.

* Before using a product sold by **Repsol**, users should make their own independent determination that the product is safe, lawful and technically suitable for the intended use.

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