



# REPSOL HEALTHCARE<sup>®</sup> HHD55G1

HHD55G1 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.

Due to its excellent environmental stress cracking resistance (ESCR), its outstanding balance between stiffness and impact resistance and its high chemical resistance, REPSOL Healthcare HHD55G1 is specially recommended for production of jerrycan containers.

## TYPICAL APPLICATIONS

Jerrycan containers for pharmaceutical and healthcare applications.

Recommended melt temperature range from 180 to 210°C. Processing conditions should be optimised for each production line.

PROPERTIES	VALUE *	UNIT	TEST METHOD
<b>General</b>			
Melt Flow Rate (190°C, 5 kg)	0.25	g/10 min	ISO 1133
Melt Flow Rate (190°C, 21.6 kg)	5.5	g/10 min	ISO 1133
Density at 23°C	955	kg/m <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Strength at Break	38	MPa	ISO 527-2
Elongation at break	900	%	ISO 527-2
Flexural modulus of elasticity	1350	MPa	ISO 178
<b>Other</b>			
Vicat Softening Temperature (10 N)	128	°C	ISO 306
Shore Hardness D	64	°	ISO 868
Environmental Stress Cracking Resistance (F <sub>50</sub> )	250	h	ASTM D-1693 (1)

(1) 10% Igepal, 50 °C

Repsol Healthcare<sup>®</sup> HHD55G1 complies with EP 3.1.3 and EP 3.1.5, and USP. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

## STORAGE

HHD55G1 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.

\*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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