Technical data sheet Chemicals

REPSOL HEALTHCARE HLD02S

HLD02S is a low density polyethylene grade, produced by high pressure autoclave technology, suitable for blown or cast film applications. It is also used to make little containers by extrusion blow moulding. This material offers easy processability and good balance of mechanical and optical properties. It does not contain any additives.

Typical Applications

Bags, pouches
Blow-fill- seal applications
Medical films
Small blow molding bottles

Recommended melt temperature range from 150 to 180ºC. Processing conditions should be optimized for each production line

PROPERTIES	VALUE	UNIT	TEST METHOD
General			
Melt Flow Rate (190 °C; 2.16 kg)	2	g/10'	ISO 1133
Density at 23ºC	920	kg/m^3	ISO 1183
Melting temperature	110	ºC	Internal (DSC)
Film 30 µm thickness film, blow up ratio 2.25:1, frost line height 40 cm**.**			
Dart drop (F_{50})	90	g	ISO 7765-1
Tear resistance (Elmendorf) (MD/TD)	300/125	cN	ISO 6383-2
Tensile stress at break (MD/TD)	29/20	MPa	ISO 527-3
Tensile stress at yield (MD/TD)	10/10	MPa	ISO 527-3
Elongation at break (MD/TD)	200/550	%	ISO 527-3
Coefficient of friction	>0,5	-	ISO 8295
Gloss (45º)	60	%	ASTM D-2457
Haze	8	%	ASTM D-1003
Thermal			
Vicat softening temperature (load 10N)	91	ºC	ISO 75

Repsol Healthcare® HLD02S complies with EP 3.1.3. and EP 3.1.4 and USP 88 class VI Biocompatibility and ISO 10993-4, ISO10993-5, ISO 10993-10, ISO 10993-1. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

STORAGE

HLD02S should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 50ºC 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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***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), <u>without prior notification to Seller for each specific product and application</u>**

(ii) **the manufacture of any of the following, <u>without prior written approval by Seller for each specific product and application</u>: 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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