

Alkatuff[®] LL705U

DESCRIPTION

Technical Data Sheet Linear Low Density Polyethylene

Alkatuff LL705UV is a hexene LLDPE material specifically designed for rotational moulding applications that require excellent ESCR, chemical resistance, stiffness and toughness. Alkatuff LL705UV is UV stabilised to provide prolonged outdoor protection in Australian conditions.

APPLICATION

Alkatuff LL705UV is a general purpose rotational moulding grade, uses of which include water and agricultural tanks, leisure craft, canoes and playground equipment. Alkatuff LL705UV complies with the base resin requirements of AS/NZS 4766 Polyethylene storage tanks for water and chemicals.

FOOD CONTACT / PRODUCT SAFETY

For food contact information please refer to the Regulatory Data Sheet at genos.com. For product safety information please refer to the Safety Data Sheet at genos.com.

Polymer Properties	Value ¹	Units	Test Method
Melt Index @ 190°C, 2.16 kg	5.0	g/10 min	ASTM D1238
Density	0.935	g/cm ³	ASTM D1505
Moulding Properties	Value ¹	Units	Test Method
Melting Point	127	°C	ASTM D3418
Thermal Stability	Pass	-	AS/NZS 4766
Tensile Strength at Yield ²	17.5	MPa	ASTM D638
Flexural Modulus (1% Secant) ³	700	MPa	ASTM D790B
ESCR F_{50} (Condition A, 100% Igepal)	>1000	hrs	ASTM D1693
Contact with Drinking Water	Pass	-	AS/NZS 4020
Hydrostatic Design Basis	6.89 ⁴	MPa	ASTM D2837
UV Resistance ⁵	UV20	-	AS/NZS 4766

Typical values - not to be construed as specifications. 1.

2 At 50 mm/min crosshead speed.

At 12.7 mm/min crosshead speed. 3.

Ingenious

Transformations

A service factor must be applied in accordance with AS/NZS 4766. 4.



Samples of injection moulded non-pigmented LL705UV retained more than 50% tensile elongation after 20,000 hours of 5. accelerated weathering in Qenos's Xenon-Arc weatherometer. Qenos is accredited by NATA to perform accelerated weathering in accordance with ASTM D2565. UV performance determined via artificial weathering does not translate into a specific outdoor UV lifespan. Many factors can influence the overall UV performance of rotomoulded articles.

For up to date information, refer to genos.com

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