

Alkatuff® LL705UV

AS/NZS 4766

Technical Data Sheet Linear Low Density Polyethylene

DESCRIPTION

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, and playground equipment. Alkatuff LL705UV complies with the base resin requirements of AS/NZS 4766 Rotationally moulded buried, partially buried and non-buried storage tanks for water and chemicals.

FOOD CONTACT / PRODUCT SAFETY

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

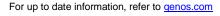
Polymer Properties	Value ¹	Units	Test Method
Melt Index @ 190°C, 2.16 kg	5.0	g/10 min	ASTM D1238
Density	0.935	g/cm ³	ASTM D1505
Moulding Properties	Value ¹	Units	Test Method
Melting Point	127	°C	ASTM D3418
Thermal Stability	Pass		AS/NZS 4766
Tensile Strength at Yield ²	17.5	МРа	ASTM D638
Flexural Modulus (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

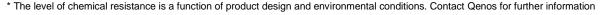
- 1. Typical values not to be construed as specifications.
- 2. At 50 mm/min crosshead speed.

UV Resistance 5

- 3. At 12.7 mm/min crosshead speed.
- 4. A service factor must be applied in accordance with AS/NZS 4766.
- Samples of injection moulded non-pigmented LL705UV retained more than 50% tensile elongation after 20,000 hours of 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.

UV20





This information is offered solely for your consideration, investigation, verification and shall not be construed as a warranty or representation for which Qenos Pty Ltd assumes legal liability, except to the extent that such liability is imposed by legislation and cannot be excluded. Values quoted are the result of tests on representative samples, and the product supplied may not conform in all respects. Qenos Pty Ltd reserves the right to make any improvements or amendments to the composition of any grade or product without alteration to the code number. In using Qenos Pty Ltd's products, you must establish for yourself the most suitable formulation, production method and control tests, to ensure the uniformity and quality of your product in compliance with all laws. Qenos Pty Ltd. RCN 054 196 771 is the registered user of the Qenos Logo which is registered trademark of Qenos Pty Ltd. Alkatuff" is a trademark of Qenos Pty Ltd.





Type Tested

AS 4766 Lic PST21573

SAI Global

Issue date: 10/01/2023 Version number: V6.0