

## DESCRIPTION

Alkatuff LL711UV is a hexene LLDPE material specifically designed for rotational moulding applications that require excellent ESCR, chemical resistance, stiffness and toughness. Alkatuff LL711UV is UV stabilised to provide prolonged outdoor protection in Australian conditions.

## APPLICATION

Alkatuff LL711UV is designed for chemical, diesel fuel and water tanks, as well as other applications where toughness, stiffness and UV protection is important. Alkatuff LL711UV 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](http://genos.com). For product safety information please refer to the Safety Data Sheet at [genos.com](http://genos.com).

Polymer Properties	Value <sup>1</sup>	Units	Test Method
Melt Index @ 190°C, 2.16 kg	3.0	g/10 min	ASTM D1238
Density	0.938	g/cm <sup>3</sup>	ASTM D1505
Moulding Properties	Value <sup>1</sup>	Units	Test Method
Melting Point	128	°C	ASTM D3418
Thermal Stability	Pass	-	AS/NZS 4766
Tensile Strength at Yield <sup>2</sup>	19.5	MPa	ASTM D638
Flexural Modulus (1% Secant) <sup>3</sup>	800	MPa	ASTM D790B
ESCR F <sub>50</sub> (Condition A, 100% Igepal)	>1000	hrs	ASTM D1693
Contact with Drinking Water	Pass	-	AS/NZS 4020
Hydrostatic Design Basis	8.62 <sup>4</sup>	MPa	ASTM D2837
UV Resistance <sup>5</sup>	UV20	-	AS/NZS 4766
Resistance to Diesel Fuel <sup>6</sup>	Pass	-	ECE-R34

1. Typical values - not to be construed as specifications.
2. At 50 mm/min crosshead speed.
3. At 12.7 mm/min crosshead speed.
4. A service factor must be applied in accordance with AS/NZS 4766.
5. Samples of injection moulded non-pigmented LL711UV 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.
6. TÜV Rheinland Kraftfahrt GmbH has certified Alkatuff LL711UV for use in the production of rotationally moulded fuel tanks. The certification applies to petroleum based diesel fuel containing up to 5% biodiesel.  
For up to date information, refer to [genos.com](http://genos.com)

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