Alchemix VC 3385
(Matrix PU 3385)

Applications

Alchemix VC 3385 is a flame-retardant polyurethane vacuum casting resin, designed for use in gravity vacuum casting machines.

Properties

- Flame retardant to UL94 V-0 and FAR 25.853
- Low viscosity
- Excellent physical properties

CURED PROPERTIES			
Properties	**Standard**	**Units**	**Typical result***
Hardness	ISO 868	Shore D	85-90
Flexural modulus	ISO 178	MPa	2250-2750
Flexural strength	ISO 178	MPa	105-115
Tensile strength	ISO 527	MPa	80-85
Tensile modulus	ISO 527	MPa	1500-1900
Elongation at break	ISO 527	%	6.0-8.0
Linear shrinkage	500 x 50 x 3 mm	%	< 0.2
Heat distortion temperature (HDT)	TMA	°C	65-75
Glass transition temperature (Tg)	DMA	°C	79-83
Tg (100°C post-cure)	DMA	°C	97-101
Flame retardancy (3 mm)	UL94	-	V-0
Flame retardancy (2 mm)	FAR 25.853**	-	Pass

* Standard cure unless otherwise stated. Values are typical manufacturer data.

UL94 V-0: tested at 3 mm thickness; file E213605.

** FAR 25.853(a), App. F Pt. I(a)(1)(i) & (b)(4): 60-second vertical test at 2 mm.

Source: Alchemie Ltd, ALCHEMIX VC 3385 technical data sheet, Issue 07, 16/06/23.