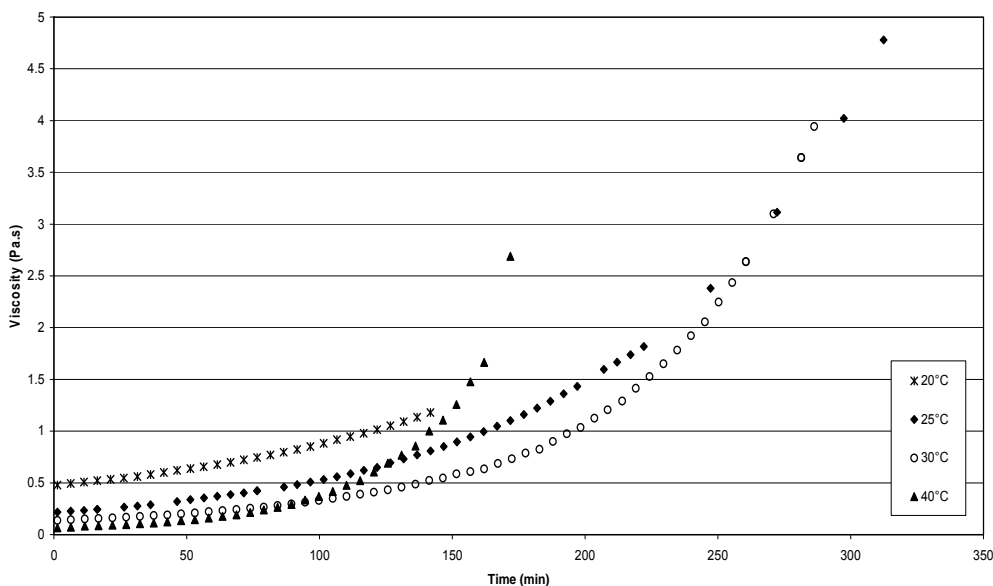


Advanced Materials**Araldite® LY 1568**
Aradur® 3489

STRUCTURAL COMPOSITES

APPLICATIONS	Industrial composites		
PROPERTIES	Laminating system with low viscosity and high flexibility. The reactivity of this system can be adjusted on demand.		
PROCESSING	<ul style="list-style-type: none"> • Infusion • Resin Transfer Moulding • Wet Lay-up • Filament Winding 		
KEY DATA	Araldite® LY 1568		
	Aspect (visual)	clear liquid	
	Viscosity at 25 °C (ISO 12058-1)	1300 - 1500	[cps]
	Density at 25 °C (ISO 1675)	1.1-1.2	[g/cm ³]
	Aradur® 3489		
	Aspect (visual)	clear liquid	
	Viscosity at 25 °C (ISO 12058-1)	5 – 20	[cps]
	Density at 25 °C (ISO 1675)	0.92-0.93	[g/cm ³]
PROCESSING DATA			
MIX RATIO	<i>Components</i>	<i>Parts by weight</i>	<i>Parts by volume</i>
	Araldite® LY 1568	100	100
	Aradur® 3489	28	35
	<p>We recommend that the components are weighed with an accurate balance to prevent mixing inaccuracies which can affect the properties of the matrix system. The components should be mixed thoroughly to ensure homogeneity. It is important that the side and the bottom of the vessel are incorporated into the mixing process.</p> <p>When processing large quantities of mixture the pot life will decrease due to exothermic reaction. It is advisable to divide large mixes into several smaller containers.</p>		
INITIAL MIX VISCOSITY (ISO 12058-1)	Araldite® LY 1568 / Aradur® 3489	[°C] at	[cp s] 200 - 300
VISCOSITY BUILT UP	Araldite® LY 1568 / Aradur® 3489		

(Rhemoeter AGR2,
plate/plate 25 mm,
100 rpm)



POT LIFE		[g]	[min]
(Tecam, 73°F, 65 % RH)	Araldite® LY 1568 / Aradur® 3489	100	850 - 950

GEL TIME		[°F]	[min]
(Hot plate)	Araldite® LY 1568 / Aradur® 3489	176	43-46
		212	15-16
		248	7-8

The values shown are for small amounts of pure resin/hardener mix. In composite structures the gel time can differ significantly from the given values depending on the fibre content and the laminate thickness.

PROPERTIES OF THE CURED, NEAT FORMULATION

GLASS TRANSITION TEMPERATURE (T _G)	Cure:	T _G [°F]	Araldite® LY1568/ Aradur® 3489
(IEC 1006, 10 K/min)	15 h 122 °F		142-149
	6 h 158 °F		167-172
	4 h 176 °F		169 -174
	8 h 176°F		171-176
	5 h 212°F		174-181

TENSILE TEST

(ISO 527)

Cure : 8 h 176 °F

Tensile strength	9.7 - 10.3
Elongation at tensile strength	4.4-5.0
Ultimate strength	7.8 - 8.4
Ultimate elongation	10.5-11.0
Tensile modulus	413 - 435

FLEXURAL TEST

(ISO 178)

Cure : 8 h 176 °F

Araldite® LY1568/ Aradur® 3489

Flexural strength	[Kpsi]	17.4 -18.8
Elongation at flexural strength	[%]	5.5-6.5
Ultimate strength	[Kpsi]	14.5 -16.6
Ultimate elongation	[%]	9.0-10.0
Flexural modulus	[Kpsi]	61.2 – 63.2

**FRACTURE
PROPERTIES
BEND NOTCH TEST**

(PM 258-0/90)

Cure : 8 h 80 °C

Araldite® LY1568/ Aradur® 3489

Fracture toughness K_{1C}	[psi√inch]	636 - 727
Fracture energy G_{1C}	[inch-lb./inch ²]	0.84 -1.06

STORAGE

Araldite® LY 1568 should be stored in a dry place, in the sealed original container, away from heat and humidity, at temperatures between +2°C and +40°C (+35.6°F and +104°F). Under these storage conditions, the shelf life is 5 years. The product should not be exposed to direct sunlight. Partly emptied containers should be closed immediately after use.

Aradur® 3489 should be stored in a dry place, in the sealed original container, away from heat and humidity, at temperatures between +2°C and +40°C (+35.6°F and +104°F). Under these storage conditions, the shelf life is 3 years. The product should not be exposed to direct sunlight.

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First Aid!

Refer to MSDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN**FOR PROFESSIONAL AND INDUSTRIAL USE ONLY**

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