

Infusion



The R120UV Infusion system incorporates specialised UV-stabilisation technology, providing excellent resistance to yellowing when exposed to prolonged or direct sunlight. This makes it particularly suitable for cosmetic laminates, exposed composite structures, and clear-finish applications.

Developed as an evolution of the proven R118 infusion platform, R120UV maintains excellent mechanical performance and processing characteristics. When used with H103 hardener, the system requires post-cure to achieve optimal thermal and mechanical properties; however, effective post-cure can be achieved at relatively low temperatures, supporting efficient production workflows.

The R120UV when cross-linked with the H103 hardener, delivers a colour-clear, optically transparent infusion resin system. This provides a significant visual advantage over standard hardener pairings, which typically impart an amber hue once cured.

The system is compatible with all common fibre reinforcements, including carbon fibre, E-glass, and aramid.

- **Carbon fibre:** Produces a deep, true black cosmetic finish due to the absence of resin ambering.
- **E-glass:** When processed correctly, laminates can achieve high translucency.
- **Clear reinforcements:** Capable of producing fully transparent composite laminates in high-clarity applications.

MIX RATIO

100 parts resin to 22 hardener resin by weight

Note: Care should be taken when dispensing and mixing. Do not attempt to control the cure time by altering the hardener ratio. Contact ATL Composites for specific

UNCURED PROPERTIES

			R120UV	H103
Physical State			Clear Liquid	Clear Liquid
Viscosity mPas	ASTM D2196	@ 25°C	440	20
Specific Gravity	ASTM D1475	g/ml@ 25°C	1.11	0.93

CURED PROPERTIES

				R120UV/H103
Pot Life - 100g	ASTM D2471	@ 25°C (In Air)		200 mins
Mixed Viscosity	ASTM D2196	@ 25°C		210 cPs
DSC Transition Temperature	ASTM E1356	24 hrs @ 25°C + 16 hrs @ 40°C		58°C
		24 hrs @ 25°C + 8 hrs @ 60°C		71°C
		24 hrs @ 25°C + 8 hrs @ 80°C		82°C
		24 hrs @ 25°C + 2 hrs @ 120°C		90°C
Ultimate Glass Transition Temperature	ASTM E1356			90°C

MECHANICAL PROPERTIES

				R120UV/H103
Tensile	ASTM D638	24 hrs @ 25°C + 8 hrs @ 80°C	Strength (MPa)	78
			Modulus (MPa)	3100
			Elongation at Break (%)	5.12
Flexural	ASTM D790	24 hrs @ 25°C + 8 hrs @ 80°C	Strength (MPa)	121
			Modulus (MPa)	3200

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KINETIX[®]

R120UV

PACK SIZES

Order Code		Order Code		PACK
RESIN		HARDENER		
RF120UV	200 KG	HF103	22 Kg	244 KG

NOTE: Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty or merchantability or fitness, nor is protection from law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special or consequential damages. 17.02.2026

STORAGE

KINETIX R120UV resin and H103 hardeners will keep for 2 years if kept in original containers at room temperature (15°C to 32°C), and out of direct sunlight. Containers should be tightly sealed to prevent moisture absorption.

HEALTH AND SAFETY

Kinetix R120UV resin and Kinetix H103 hardener have moderate sensitising potential, and should be kept out of the eyes and off the skin.

- Use with good ventilation and adequate safety equipment including impervious gloves and safety glasses.
- If skin contact occurs, remove contaminated clothing immediately, and wash the affected area thoroughly with water, avoiding the use of solvents except in the case of massive contamination.
- If eye contact occurs, immediately flush with running water for at least 15 minutes and seek medical advice.
- If swallowed:
 - Resins** - DO NOT induce vomiting, and contact a doctor or the Poisons Information Centre.
 - Hardeners** - DO NOT induce vomiting, give plenty of milk or water and contact a doctor or the Poisons Information Centre.