

KINETIX R240 is a low viscosity resin specifically formulated for use with H126, H160, H161, H162 hardeners to offer a variety in pot-life and working times as a room temperature laminating system.

Designed for laminating, R240 resin and hardeners produce stronger, stiffer and tougher laminates than conventional general purpose epoxy systems. Excellent mechanical properties are produced in carbon fibre, aramid and fibreglass laminates.

MIX RATIO

25 parts hardener to 100 parts 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 information.

UNCURED PROPERTIES

	R240	H126 SuperFast	H160 Medium	H161 Slow	H162 Super Slow
Physical State	Clear liquid	Clear pale brown liquid	Clear pale yellow liquid	Clear pale yellow liquid	Clear pale yellow liquid
Viscosity mPas @ 25°C	1600	160	30	25	20
Specific Gravity g/ml @ 25°C	1.15	0.99	0.95	0.94	0.93

CURE CHARACTERISTICS

	H126	H160	H161	H162
Pot Life - 100g @ 25°C (in air)	20 minutes	35 minutes	50 minutes	75 minutes
Thin-laminate OpenTime @ 25°C	2 hours	4 hours 20 mins	4 hours 40 mins	5 hours 30 mins
Demould time @ 25°C	5 hours	12 hours	12 hours	14 hours
Mix viscosity mPas @ 25°C	880	600	470	400
Shore D Hardness -1 day	79	80	74	76
- 2 weeks	82	82	76	77
HDT after 1 day @ 25°C	49°C	42°C	40°C	39°C
2 weeks @ 25°C	56°C	49°C	49°C	47°C
16 hrs @ 40°C	65°C	57°C	55°C	58°C
16 hrs @ 50°C	75°C	67°C	65°C	66°C
8 hrs @ 60°C	79°C	73°C	73°C	71°C
8 hrs @ 80°C	89°C	79°C	78°C	82°C
Ultimate HDT	95°C	82°C	82°C	87°C

MONITORING OF CURE

A laminator wishing to monitor progress of cure has a number of on the spot options open to him. Small test aliquots of mixed resin can be placed in waxed lids during lamination. These should be subjected to the same cure conditions as the actual laminate, and later compared with standard samples which are known to be fully cured. The samples should be flat on the bottom and approximately 2 to 3 mm thick.

Allowance should be made for the possible effect of foam core insulating the curing resin, and reducing the cure of the inner layer.

To monitor the development of Heat Distortion Temperature (HDT) immerse the sample in a container of warming water, noting the temperature at which the sample becomes rubbery. Providing sample thickness is kept constant, this simple technique gives surprisingly reproducible results

The cure time will vary based on the resin and hardener selected, the ambient temperature and laminate thickness.

CALCULATING RESIN/HARDENER FOR A FIBREGLASS LAMINATE

As a rough rule for the amount of resin/hardener required to achieve proper wetting out and consolidation of a laminate, use a 1:1 ratio of fibreglass weight per m² to resin/hardener weight, plus wastage

e.g. 1m² of 600gsm biaxial E-fibreglass will require 600grms of mixed resin and hardener + a 10% wastage factor

PACK SIZES

Order Code		Order Code		PACK
Resin		Hardener		
RC 240	4kg	HC 126	1 kg	5kg
		HC 160	1 kg	
		HC 161*	1 kg	
		HC 162	1 kg	
RD 240	18kg	HD 126	4.5kg	22.5kg
		HD 160	4.5kg	
		HD 161*	4.5kg	
		HD 162	4.5kg	
RF 240	192kg	HF 126	48kg	240kg
		HF 160	48kg	
		HF 161*	48kg	
		HF 162	48kg	

* H161 is a Made to Order product and a minimum purchase quantity is applicable

STORAGE

KINETIX R240 resin and H126, H160, H161, H162 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 & SAFETY

KINETIX R240 resin and H126, H160, H161, H162 hardeners 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 (fifteen) 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.