

TECHNIREZ R2600 is a solvent free, liquid epoxy system specifically formulated for use with H2403 or H2409 hardeners to provide excellent high temperature thermal performance after post cure.

Suitable for casting, laminating and infusion.

Typical applications include the casting and laminating of jigs and tools that will be used in high temperature applications, such as pre-preg moulds and vacuum forming tools.

MIX RATIO

25 parts of H2403 hardener to 100 parts of resin by weight

35 parts of H2409 hardener to 100 parts of 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.

Note: TECHNIREZ R2600 is prone to crystallization. Please see storage information.

UNCURED PROPERTIES			
	R2600	H2403	H2409
Physical State	Clear liquid	Clear liquid	Clear liquid
Viscosity mPas @ 25°C	2,500 - 3,500	15-20	100 - 140
Specific Gravity g/ml @ 25°C	1.16	0.93	0.95
Flash Point	250°C	100°C	100°C

CURE CHARACTERISTICS		
	H2403	H2409
Pot Life-100g @ 25°C	232 mins	680 - 710 mins
Demould Time @ 25°C	24 hrs +8 hrs @ 50°C	24 hrs +8 hrs @ 50°C
Mix Viscosity mPas @ 25°C	510	880
Shore D Hardness	85	88

* R2600 resin with H2403 and H2409 hardeners exhibit brittle "B" stage at ambient temperature prior to post cure.

THERMAL CHARACTERISTICS (Tg)		
	H2403	H2409
+ 8 hrs @ 50°C*	75°C	75°C
+ 8 hrs @ 50°C + 3 hrs @ 90°C*	112°C	111°C
+ 8 hrs @ 50°C + 3 hrs @ 90°C + 3 hrs @ 120°C*	143°C	132°C
+ 8 hrs @ 50°C + 3 hrs @ 90°C + 3 hrs @ 120°C + 2 hrs @ 150°C*	157°C	155°C
+ 8 hrs @ 50°C + 3 hrs @ 90°C + 3 hrs @ 120°C + 2 hrs @ 150°C* + 1hr @ 200°C*	160°C	177°C
+ 8 hrs @ 50°C + 3 hrs @ 120°C + 2 hrs @ 150°C + 1hr @ 200°C* + 1hr @ 220°C*	160°C	180°C

* Post cure schedule Tg₂ by DSC

CURE CHARACTERISTICS

	H2403	H2409
Tensile Strength (MPa)*	48	52
Tensile Modulus (MPa)*	2825	2670
Tensile Strain @ Break (%)*	2.2	2.87
Flexural Strength (MPa)**	123	107
Flexural Modulus (MPa) **	3340	2570
Compressive Strength (MPa)†	120	139
Compressive Modulus (MPa)†	1975	1648

*Standard Test Method for Tensile Properties of Plastics.(ASTM D638-97)

**Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.(ASTM 790-03)

†Standard Test Method for Compressive Properties of Rigid Plastics, ASTM 695-96

PACK SIZES

Order Code

Resin	Hardener
RC 2600 4 kg	HC 2403 1 kg
RD 2600 18 kg	HD 2403 4.5 kg
RF 2600 200 kg	HE 2403 22 kg
	HC 2409 1 kg
	HD 2409 4.5 kg
	HE 2409 22.5 kg

STORAGE

TECHNIREZ R2600 is prone to crystallization and should be stored, and temperature maintained, at a minimum of 25°C to prevent crystallization. Limiting temperature fluctuations will also reduce the tendency to crystallize.

If crystallization does occur, R2600 should be heated to 60°C - 80°C overnight (12 hours) to re-liquify the system. Before allowing the material to cool down, ensure that all potential crystals have melted and can no longer act as seeds. Carefully watch the container sides, the container bottom and the areas around the caps when inspecting for signs of crystallization that could nucleate additional crystal growth.

TECHNIREZ H2403 and H2409 hardeners will keep for 2 years if kept in original containers at room temperature (15°C to 40°C), and out of direct sunlight. Containers should be tightly sealed to prevent moisture absorption.

HEALTH AND SAFETY

TECHNIREZ R2600 resin and H2403 and H2409 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.

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. 22.8.17

