

PETROPOXY 154

TECHNICAL DATA SHEET



TYPICAL PROPERTIES (to be used as a guideline only)

NUMBER OF COMPONENTS:	Two
MIXING RATIO (by volume):	
Resin	10
Curing Agent	1
OPTIMUM CURE TEMPERATURE:	135°C
CURE SCHEDULE:	Maximum bond strength is attained in 10 minutes@135°C
INDEX OF REFRACTION:	1.540 after ~40 minutes@135°C

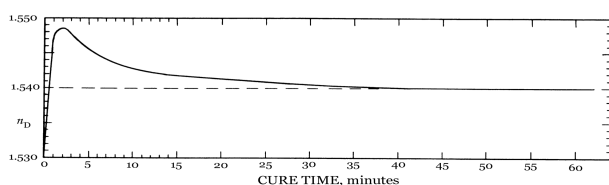


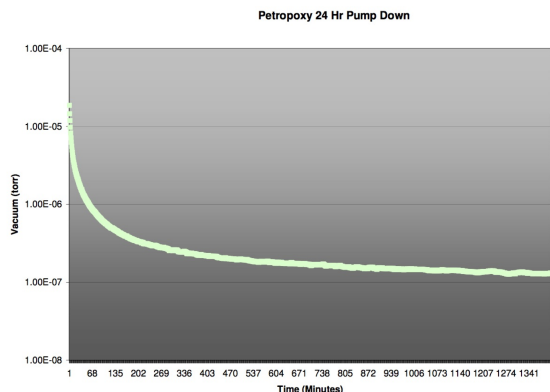
Figure 2. n_D of Petropoxy 154 as a function of cure time at 135°C

PHYSICAL PROPERTIES

Viscosity (mixed):	350-500 cps@20°C (estimate)
Lap Shear Strength:	not measured (relatively high)
Specific Gravity (mixed):	1.18
Resin:	1.17
Curing Agent:	1.30
Shore D Hardness:	84.5 - 86.0
Coefficient of thermal expansion:	not measured (relatively high)

→ Mixed Petropoxy 154 contains significant amounts of Boron and should be avoided if preparing samples for Boron isotope analysis.

OUTGASSING PROFILE:



Source: The University of Edinburgh
<https://www.ed.ac.uk/geosciences/facilities/ionprobe/technical/epoxyresins/pumptests>

POT LIFE:	5 - 7 days@20°C
SHELF LIFE:	Indefinite when stored at room temperature. Keep containers tightly closed when not in use.

*Preparation of thin sections for all methods of analysis.
Petropoxy 154 Thin Section Epoxy • Petrographic Slide Boxes*

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Petropoxy 154

Formulated specifically for the preparation of petrographic thin sections.

Best Refractive Index - $n_D=1.540\pm0.00$, considered ideal for general petrography.

Highest Bond Strength - For most rocks and minerals, the Petropoxy 154 bond to unfrosted slides is stronger than either the specimen or the slide, which allows you to saw and rough grind a much thinner section than with any other mounting medium. Re-mounting of specimens due to plucking and bond separation is virtually eliminated.

Longest Pot Life - The pot life of mixed Petropoxy 154 is at least 5 days at room temperature. Most other epoxies begin to cure anywhere from 0.5 to 3 hours, which leads to waste of unused portions and constant mixing of new batches.

Shortest Cure Time - Cure time for a high strength bond is only about 10 minutes. Optimum cure temperature is 135°C (275°F). Petropoxy 154 is a 100% solids system - there are no solvents to vaporize, there are no by-products of the cure reaction.

Best Impregnation - The low viscosity of Petropoxy 154 at working temperature provides excellent penetration during impregnation and specimen mounting.

Best For Cover Glasses - Because of its low viscosity and long pot life, applying cover glasses with Petropoxy 154 is faster and simpler than with any other mounting medium.

Everything Included in a Standard Kit - Standard and Evaluation Kits of Petropoxy 154 are supplied with everything needed to dispense, mix and apply the medium.

Warranty - If you are not satisfied with Petropoxy 154, tell us why and we'll refund the purchase price. This is the only warranty applicable to Petropoxy 154. Burnham Petrographics LLC assumes no other obligation or liability in connection with this product.