

HXTAL NYL-1

The World's Best Optical Epoxy

HXTAL NYL-1 is a museum grade ultra pure, totally transparent optical epoxy which combines high strength with unique non-yellowing characteristics

HXTAL NYL-1 formulated to perfectly match index of refraction of glass, ceramic, metals, ivory, marble and many other substrates

HXTAL NYL-1 is formulated in a 3:1 ratio by weight. 3 parts of the Resin (Part A) for every 1 part of Hardener (Part B). It is highly recommended that HXTAL be mixed with an accurate scale to achieve proper ratios.

HXTAL NYL-1 generally tack free in 24H, support limited movement of pieces after 3 days and achieve 90% of bond cure in 7 days at 24°C

HXTAL NYL-1 was originally created for the restoration and conservator industries. The long cure time allows the conservator the ability to let HXTAL thicken up to the point where it can be used for molds or for replacing missing parts of most glass and porcelain materials. This also allows for an extended pot life when the epoxy is mixed thus allowing time for the removal of air bubbles from the mixture before use and to allow for the patient and steady application of HXTAL without worrying about set times. It is also useful when bonding larger heavier pieces to allow HXTAL to set to a point where the epoxy is less likely to be squeezed out of the bond joint by the heavier pieces.

HXTAL NYL-1 can be tinted to match several different colored glasses and porcelain materials. There are many different tinting agents available on the market, but we recommend the use of Orasol dyes as a trustworthy and often used tinting agent for HXTAL NYL-1. Many porcelain conservators will utilize powdered titanium as a tint matching agent.

Technical Data/ Physical Properties

Appearance	Clear 2 component epoxy system
Tensile Strength	5400psi
Tensile Modulus	316,000 psi
Elongation	3%
Flexural Strength	10,100 psi
Flexural Modulus	365,000 psi
Impact Strength	0.14 ft lbs/inch
Heat Distortion Temp 264/66psi	37.5°C/39°C
Hardness (Shore D) 0/10secs	78/73
Refractive Index	1.515
Gel time, 110g mass 150°F	25.8 minutes
100°F	262.7 minutes
Cure of 0.2mm film at 25°C	15.3 hours
Full Cure	14 days
Initial Yellowness index	~6
Yellowness after 1600 hours of weatherometer exposure	~6-8
Yellowness after 3000 hours of weatherometer exposure	~13

Currently, there is no known shelf life for unopened HXTAL containers.

HXTAL will not degrade over time and stays viable for years after initial batch creation.

This product has been tested to assure conformance to certain quality standards. However, since the manufacturer has no control over actual application- no warranty regarding the results to be obtained from the use thereof. User must determine the suitability of this product for the intended application and assume all risk in connection therewith.

HXTAL Adhesive, LLC

email: info@hxtal.com • www.hxtal.com

Distributor:

R&C - Produtos Para Restauero LTD • www.restaurarconservar.com

