

NSR390

Filler-Sealant for Harsh Environments, Cure-On-Command

Product Description:

NSR390 is a single component, solvent free, photo-curable resin designed for use as a filler and sealant in applications that benefit from the cure-on-command characteristics of the resin. The product also cures across a broad temperature range and in moist, including fully submersed, environments. The product has been optimized for adhesion to metals, plastics, composites, concrete and wood. The product cures in as fast as 30 seconds when exposed to a specified wavelength of light or when in direct contact with full sunlight.

Typical Applications:

NSR390 can be used to fill cracks, voids or defects by applying the resin directly to a properly prepared surface. With the consistency of a paste, the resin can be applied in vertical applications without concern of running. Resin can be used to create an end-cap for conduit. It can be sanded and painted immediately after proper curing.

Suggested Light Source:

Visible light cure: 470 nanometers, > 2.5mW/cm²
 Portable light sources are available from North Sea Resins based on LED technology. Sunlight is an effective light source.

Typical Uncured Properties:

Chemistry	Acrylate
Color	Yellowish, white colored
Specific Gravity	1.18
Viscosity at 70°F	Paste—4840 poise

Typical Physical Properties of Cured Material:

Hardness, ASTM D-1474, ASTM E-384 (HV) Vickers, 25g, 18s	20
Coefficient of Thermal Expansion ASTM 831-00	$88 \times 10^{-6} / ^\circ\text{C}$

Typical Properties of Cured Material:

Electrical Properties	Insulator
Resistance to solvents	Good
Temperature Resistance (°F)	-65 to 300

Storage and Shelf Life:

This product is light sensitive. Store in original container. Store product at 60-80°F or refrigerate for maximum shelf life.

Shelf life is 12 months when stored at 60-80°F.

Directions for use:

Flip-cap container allows for multiple uses of resin. The product is light sensitive and exposure to daylight will initiate curing process. Avoid exposure of open container to direct sunlight when removing desired material. A light sanding with 150 grit sandpaper is recommended prior to application of the resin. For optimal adhesion, the surface should be clean of dust and dirt. An important consideration is the resin will cure-on-command only if the appropriate light reaches the resin. For deep fill applications, apply resin in 1/8 inch layers.



NSR390 Filler, flip-top container applied with stick or putty knife.



NSR390 used to form end-cap

Precautionary Information:

Refer to Material Safety Data Sheet for health and safety information before using this product.

Important Notes: Data contained herein is preliminary (pre-release product) and furnished for information only and are believed to be reliable. Due to the variety of factors that can affect the use and performance of a North Sea Resins (NSR) product, some of which are uniquely within the user's knowledge and control, user is responsible for determining whether the NSR product is fit for a particular purpose and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. NSR makes no warranties, expressed or implied, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose. If NSR product is proved to be defective, the exclusive remedy, at NSR's option, shall be to refund the purchase price of or to repair or replace the defective NSR product. NSR disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of NSR products. NSR specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.