

North Sea Resins Industrial Repair Selector Guide

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Cure-On-Command Resin Formulation for Harsh Environments			
North Sea Resins 950 Danby Road Suite 300 Ithaca NY 14850 www.northsearesins.com	NSR150	NSR250	Comment
Use Considerations			
Single component resin-- No mixing required	Yes	Yes	
Package	Syringe	Syringe	Syringes have screw cap that allows for multiple uses. Flip top container can is recloseable for multiple uses.
Application Method	NSR Tab	NSR Tab	NSR Tabs are not required. NSR Tabs assist in applying resin onto the surface and securing the resin in place through light cure step
Harsh Environments			
Temperature Conditions for Curing (degF)	28 to 104	28 to 104	Strength and cure time effective at high and low temperature
30 Second Cure time for use in open air	Yes	Yes	30 second functional cure when used with NSR Light
30 Second Cure time for use underwater	Yes	Yes	30 second functional cure when used with NSR Light
Applications			
Adhesion to Metals (Copper, Brass, Steel, Cast Iron, Lead Pipe, Black Pipe, Aluminum)	Good	Best	See Technical information for details
Adhesion to Plastics (FRP, ABS, HDPE, PVC, CPVC, PEX tubing, Gelcoat)	Best	Good	See Technical information for details
Adhesion to Wood	Better	Better	See Technical information for details
Adhesion to Concrete	Best	Better	See Technical information for details
Adhesion to Rubber	Poor	Poor	Resins not recommended for use with rubber
Vertical or Horizontal fill applications.	Good	Good	Consideration of resin running prior to light activation
Pin-hole, crack, joint, elbow, pipe and tank repair	Preferred	Preferred	NSR150 & NSR250 previously received NSF 61 approval for use on Drinking Water Systems.
Low pressure applications, filler	Better	Better	
Use with mesh wraps for reinforcement	Best	Best	Fiberglass included in kits and refill packs, see Technical information for details.
Post Cure Characteristics			
Temperature Resistance (degF)	-65 to 300	-65 to 300	
Can be sanded	Yes	Yes	
Can be painted	Yes	Yes	
Tacky residue if cured in air	Yes	Yes	NSR Applicator Tabs eliminate tacky residue. Tacky feel does not impact strength of bond.
Benefits	Cure-On-Command	Cure-On-Command	Resin cures upon activation by visible blue light. Use NSR LED Flashlights for fast cure time
Limitations	Light reaching bond line	Light reaching bond line	

Chemical Resistance*

Chemical	Conc %	Effectiveness**
Gasoline	100%	Acceptable
Diesel Fuel	100%	Acceptable
Salt Water	100%	Acceptable
Drinking Water	100%	Acceptable
Sodium Hydroxide	50%	Acceptable
Hydrochloric Acid	37%	Acceptable
Acetic Acid	100%	Acceptable
Ethylene Glycol	100%	Acceptable
Acetone	13%	Acceptable
Ammonium Hydroxide	25%	Acceptable
Sodium Hypochlorite	13%	Acceptable
Sulfuric Acid	98%	10 days
Nitric Acid	70%	10 days

* NSR Resins are intended for use as temporary, rapid repairs, allowing for scheduling of disruptive, replacement maintenance.
 ** Test conditions- 1/8" hole in pipe, repaired with resin. Repair fully exposed to chemical.