



**HIGHTECH**  
INDUSTRIAL COATINGS

# NOVOTECH 500

1:1 SOLVENT-FREE NOVOLAC CHEMICAL RESISTANT LINER AND COATING

## PRODUCT DATA

Mix Ratio . . . 1 Part A to 1 Part B

Coverage . . . 1600 sq. ft. at 1 mil.

Shelf life . . . . . 12 months

## COLOR PIGMENTS

Part-A: Grey

Part-B: Clear

## PACKAGING

### 2 Gallon Kit:

Part A . . . . . One 1 Gallon Can

Part B . . . . . One 1 Gallon Can

### 10 Gallon Kit:

Part A . . . . . One 5 Gallon Can

Part B . . . . . One 5 Gallon Can

### 55 Gallon Kit:

Part A . . . . . 55 gallon drum,  
net fill 50 gallons

Part B . . . . . 55 gallon drum,  
net fill 50 gallons

## PRODUCT DESCRIPTION

NOVOTECH 500 is a multifunctional phenol novolac resin that is extremely chemical resistant with a high heat deflection temperature. NOVOTECH 500 is a thick film novolac lining designed to cure at ambient temperature to provide exceptional corrosion protection for surfaces in severe chemical and physical environments.

## ADVANTAGES

- Corrosion Protection
- Heavy-Duty Chemical Resistant Protective Lining
- Abrasion Resistant
- Extremely Hard and Tough

NOVOTECH 500 will provide a high degree of protection against corrosive moisture, fumes, carbon dioxide, hydrogen sulfide, methane gases, industrial water and wastewater solutions containing salts, detergents, many acids, alkalis, and other chemicals. NOVOTECH 500 is used as a heavy-duty chemical resistant protective lining. NOVOTECH 500 is also resistant to petroleum products such as kerosene, diesel, gasoline, aviation fuels, motor oils, lubrication materials, greases, hydraulic fluids, alcohols, aliphatic and aromatic hydrocarbon solvents.

## APPLICATIONS

- Crude and Storage Tanks
- Pipe Lining Systems
- Containment Wall and Floors
- Mining and Milling Industries
- Petrochemical Plants
- Pulp and Paper Industry
- Power Generating Plants
- Water Treatment Plants
- Food Processing Facilities
- Wastewater Treatment Plants
- Internal Tanks
- Steel Structures and Bridges

## PHYSICAL PROPERTIES

PROPERTY	VALUE	REFERENCE
Mix Ratio by Volume	1 Part A to 1 Part B	-
Solids Content	100%	
Pot Life at 75°F (24°C), 50% R.H.	30-45 min.	
Dry Film Thickness per Coat	5 ± 1 mils 127 ± 25 microns	-
Specific Gravity	Part-A: 1.17   Part-B: 1.50	-
Total Solids by Weight	100%	ASTM D-2369
Total Solids by Volume	100%	ASTM D-2697
Volatile Organic Compounds	0 lb/gal (0 gm/liter)	ASTM D-2369-81

## MIXING

The volume mixing ratio: 1A : 1B. NOVOTECH 500 may not be diluted under any circumstances. NOVOTECH 500 Side-A into Side-B. Power stir product until completely mixed and uniform color appears, approximately 5 minutes, and continue agitation during application.

## COVERAGE

NOVOTECH 500 may be applied at any rate to achieve desired thickness. Theoretical coverage per gallon is 1600 sq. ft. at 1 mil.

## SURFACE PREPARATION

In general, coating performance is directly proportional to surface preparation. All surfaces must be clean, dry and free of oil, grease, wax, dirt, chalk, salts and other contaminants. Round off sharp edges and rough welds. Burrs and weld spatter should be completely removed.

**Carbon Steel:** Use SSSP Guidelines for surface preparation. Metal surfaces should have an anchor profile of 3 mils (0.003) or more. If metal substrate has "cavities" or "indentations" apply primer application coat and back roll to completely wet and thoroughly penetrate surface to ensure all voids and irregularities are filled.

**For Internal Linings:** Abrasive blast to SSSP-SP-5 (White metal) to achieve a surface anchor profile of 22-3 mils.

**For Exterior Use:** Abrasive blast to SSSP-SP-10 (Near white) to achieve a surface anchor profile of 12-2 mils. After abrasive blasting, remove all dust or other contaminants by vacuum or dry air blow-down. Abrasive blasted metal surfaces must be primed as soon as possible, do not allow to remain overnight. If flash rusting occurs it must be removed.

**Concrete and Masonry:** Concrete and masonry to cure at least 28 days. Surface and substrate must be dry and clean. Clean and open surfaces by dry abrasive "brush-off" blast. All concrete laitance should be removed. "Blow" holes and cavities should be opened in order to properly fill and seal. Level protrusions and repair cavities, voids, and cracks. Apply primer application coat and back roll to completely wet and thoroughly penetrate surface to ensure that all irregularities are filled and sealed.

Remove all contaminants and deteriorated concrete. Brush blast to achieve roughed surface sufficient to remove laitance or surface hard-face. Vacuum all concrete surface prior to application of primer. All cracks, rock pockets and voids must be filled with non-shrink grout, and sanded. Concrete must be free of puddled water or moisture.

Remove all contaminants and deteriorated concrete. Brush blast to achieve roughed surface sufficient to remove laitance or surface hard-face. Vacuum all concrete surface prior to application of primer. All cracks, rock pockets and voids must be filled with non-shrink grout, and sanded. Concrete must be free of puddled water or moisture.

## APPLICATION

Applied over: Carbon steel, or concrete. Surface Preparation Method: Carbon Steel: SSSP-SP-10, 5 or SP-12 (WJ-4)

Application temperature NOVOTECH 500 should be between 50-110°F (air and surfaces). Do not apply product unless temperature is at least 5° above the dewpoint. Recoat schedule is 2-8 hours at 70°F and dependent upon environment. See Specification Guide for re-coating guidelines and additional information.

**Airless:** Use Graco 68:1 pump or higher, 206-718 gun with fluid tip of .019" or larger orifice size with Reverse-A-Clean tip, 3/8" I.D. or larger high-pressure solvent resistant fluid line, 1/2" I.D. or larger air supply line. Continuous air source capable of 80 to 100 psi inbound pressure at pump. Equipment of equal performance is acceptable.

### LIMITED WARRANTY:

*Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Hightech representative or visit our website for current technical data and instructions.*

Hightech warrants its products to be free of manufacturing defects and that they will meet Hightech current published physical properties. Hightech warrants that its products, when properly installed by a state licensed waterproofing contractor according to Hightech guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Hightech of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Hightech shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Hightech shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Hightech reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

### DISCLAIMER:

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Hightech makes no claim that these tests or any other tests, accurately represent all environments

**KEEP OUT OF REACH OF CHILDREN**

## APPLICATION CONT.

**Conventional Spray:** Variations of conventional production spray equipment such as pressure pot, air assisted airless or high volume, low pressure systems as supplied by Binks, Graco, Nordson, Devilbiss or equal may be used.

**Brush:** Use solvent resistant short hair or natural bristle brush. **Roller:** Use short nap synthetic covers for back rolling. Ribbed metal roller.

## CLEAN UP

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

## STORAGE

NOVOTECH 500 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C). Avoid freezing temperatures. Store drums on wooden pallets to avoid direct contact with the ground.

## LIMITATIONS

The uncured materials used in NOVOTECH 500 are very sensitive to heat and moisture. Higher temperature and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extends the cure time and the use of accelerators may be necessary. Inspect the installed work of other trades and verify that all such work is complete so that NOVOTECH 500 may be installed.

All surfaces to receive NOVOTECH 500 must meet all applicable building and safety codes in the prescribed city, county or state, whichever has jurisdiction.

The substrate must be structurally sound and sloped for proper drainage. No liability is assumed by Hightech for substrate defects and for improper surface preparation and application.

NOVOTECH 500 must cure at least 24 hours at 75°F (24°C) and 50% relative humidity before any immersion services. Cure time may be longer at lower temperature. Do not open until ready to use.

No liability is assumed by Hightech for substrate defects and/or improper substrate preparation and application.

## WARNING

This product contains Epoxy Resin and Curatives.