# TECHNICAL DATA

# NP865IT, High Performance Aromatic Polyurethane Coating

NP865IT is a single-component, liquid applied, high tensile strength, moisture cured, aromatic polyurethane surface protection coating.

#### **FEATURES & BENEFITS:**

Single-component application
High strength, high elongation, high adhesion
Excellent aggregate binding qualities
Withstands extreme environmental conditions
Easy application and rapid cure
Designed for demanding exterior applications

Adds protection to concrete and plywood decks, parking structures, mechanical equipment pads and areas that require a seamless membrane for protection against water damage.

In some applications, NP865IT can be used as a topcoat membrane.

<u>PRODUCT DESCRIPTION:</u> Basic Uses: NP865IT is a wear surface topcoat used in some deck coating systems. The NP865IT is also used as the high strength, high adhesion, aggregate receiving coat in our heavy duty vehicular deck coating system. Please refer to the pertinent Application-Specification Guide on each of these systems.

LIMITATIONS: Containers that have been opened must be used within one or two days since the product is a moisture-reactive material that will gel or set up when exposed to moisture in the air. A polyethylene sheet should be used as a blanketing material prior to re-sealing the lid on a partially used container. Prior to the application of NP865IT, proper surface preparation procedures must be followed. Refer to the NPI Technical Bulletin on Surface Preparation of plywood and concrete substrates. NP013 epoxy primer/sealer should be used as necessary followed by NP863B basecoat and a suitable intermediate coat when required before the application of the NP865IT. When used as a topcoat, the surface appearance may become flat, may form a light chalky condition and will have some color change upon prolonged UV exposure. Review technical bulletins for additional information. NP865IT cures faster when applied under warm temperatures and high humidity conditions and slower in a cool and low humidity environment.

SHELF LIFE: Nine (9) months after manufacture when continuously stored in unopened metal pails at temperatures less than 80°F. Stir thoroughly prior to use.

INSTALLATION: Surface Preparation: All substrates must be free of all contaminants and should be primed with NP013 prior to the application of NP863B base coat or NP865IT elastomeric membrane. Apply primers at a rate of 229 – 320 square feet per gallon. As a moisture cure product, the relative humidity should be greater than 30% and less than 90% during the application and cure of the product. Each application should be done in one complete step to insure a smooth and level coat with no lines or streaks to disfigure the deck. Application should not be stopped part way across an area and then completed later.

**APPLICATION:** NP865IT is normally applied at a rate of 80 to 110 square feet per gallon, per coat, resulting in a 15 to 20 mil wet film thickness. If more than one coat is required, allow a minimum of 16 hours and a maximum of 48 hours cure time between coats. NP865IT is easily applied by roller, notched squeegee or notched trowel. Always follow by back rolling. Application should not commence unless the ambient temperature is 40°F or higher and should not proceed during inclement weather. NP865IT is usually used in conjunction with NP863B base coat, and NP866T aliphatic topcoats, as described in the various NPI Application-Specification Data Sheets. NP861A accelerator may be added to NP865IT to allow for a shorter cure time. Please refer to the Technical Literature on accelerators or contact NPI for details.

<u>PRECAUTIONS:</u> Before using this product, read the container precautionary label and SDS sheet carefully. Exposure to urethanes or petroleum solvents may cause allergic skin or respiratory reactions. Do not get into eyes, onto skin, or clothing. If contact occurs, flush affected areas with soap and water. Wash clothing before reuse. Use only with adequate ventilation. Seek medical help for all-over exposures. THIS PRODUCT IS FOR PROFESSIONAL USE ONLY.

**CURE TIME @ 77°F, 50% R.H.** 

VOC CONTENT 250g/l Calculated

@ 20 mils, - 16-24 hours

MIX RATIO BY VOLUME:

One component – mix well before using.

**STANDARD COLOR:** Storm Gray and Fawn. Special colors are available upon request and are subject to minimum manufacturing quantities.

## COVERAGE, Sq. Ft./Gal

80-110 sq. ft (typical).

TECHNICAL DATA – 865IT		
Property	Typical Value	Test Method
Solids Content (by weight)	$78 \pm 2\%$	ASTM D-1353
Weight Per Gallon	9.7 +/- 0.2 lbs.	ASTM D-1475
Viscosity @ 77°F	25-35 poise	ASTM Brookfield
Flash Point	Above 116°F	ASTM D-93
Tensile Strength	3300 +/- 300 psi	ASTM D-412
Ultimate Elongation	225 +/- 50%	ASTM D-412
Hardness Shore A	90 +/- 5	ASTM D-2240
Tear Resistance	300 +/- 50 lbs/in	ASTM D-1004
Water Vapor Permeability	0.3 perms	ASTM D-96
Adhesive Bond Strength	30 pli to base coat	

### NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

LIMITED WARRANTY NPI warrants this product to be free of defects in workmanship and materials only at the time of shipment from our factory. If any NPI materials prove to contain manufacturing defects that substantially affect their performance, NPI will, at its option, replace the materials or refund its purchase price. This limited warranty is the only warranty extended by NPI with respect to its materials. There are no other warranties, including the expressed or implied warranties of merchantability and fitness for a particular purpose. NPI specifically disclaims liability for any incidental, consequential, or other damages, including but not limited to, loss of profits or damages to a structure or its contents, arising under any theory of law whatsoever. The dollar value of NPI's liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the NPI material in question. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommenced herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.

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