

TD.451 – TECHNICAL DATA: E100-NV5™ High Performance Novolac Protective Coating

Revised: 11/7/2023 Version: 1.7

Description: E100-NV5™ High Performance Novolac Protective Coating is a highly chemical resistant coating for immersion service subjected to corrosive reagents such as 98% sulfuric acid, nitric acid, and most bases and solvents. Excellent for most flooring, wall, and equipment coating applications where extreme chemical resistance is required.

Typical Uses:

- Barrier coating for most corrosive acids, alkalis, and solvents
- Horizontal applications
- Industrial floors
- Secondary containment areas
- Can be used as a neat, broadcast, or mortar application

Key Features:

- Bonds to concrete, steel, and other substrates
- Resistant to most chemical reagents (splash & spill)
- Provides a tough wearing surface for most industrial traffic
- Resistant to concentrated sulfuric acid (1-98%) in immersion
- USDA and CFIA compliant

Product Properties: Material and curing conditions at 77° F / 24° C unless noted, 50% R.H.

Cure Schedule

- Colors: Brick red, black, clear
- Viscosity @ 77° F / 24° C
 - o Part A: 2200 cps
 - o Part B: 400 cps
 - o Mixed: 1900 cps
- Pot life: 20 minutes
- Tack free: 6 hours
- Foot traffic: 12 hours
- All traffic: 24 hours
- Chemical exposure: 48 hours
- Immersion: 10 days

Physical Properties

(@77° F / 24° C, 50% R.H., 7-day ambient cure)

Compressive strength	ASTM D695	12,000 psi
Tensile strength	ASTM D638	6,900 psi
Flexural strength	ASTM D790	8,800 psi
Ultimate elongation		4.2%
Shore D hardness	ASTM D2240	89
Taber abrasion resistance		
CS-17-wheel, 1000 gm load, 500 cycles	ASTM D4060	18 mg loss
Heat deflection temperature	ASTM D648	130° F / 54° C
Reaction to fire	EN 13501-1:2018	B _{FL} – s1

Chemical Resistance

SP=splash and spill 6 hours, **SC**= secondary containment 72-hour resistance, **INT**=intermittent immersion 8-hour exposure with clean up
IMM= immersion indefinitely at ambient temperature

ORGANIC ACIDS

Acetic 1-10%	IMM
Battery acid 1-98%	IMM
Chromic 1-30%	INT
HCL 1-37%	IMM
Hydrofluoric 1-40%	INT
Nitric 1-20%	IMM
Oleic	IMM
Phosphoric 1-85%	IMM
Sulfuric 1-98%	IMM

BASES ALKALINES

Ammonia 1-25%	IMM
Ammonium Hydroxide 1-25%	IMM
Black Pulp Liquor	IMM
Calcium Hydroxide 1-25%	IMM
Hydrogen Peroxide 1-30%	IMM
Green Pulp Liquor	IMM
Sodium Hypochlorite 1-9%	INT
Sodium Hydroxide 1-50%	IMM
Potassium Hydroxide all	IMM

SOLVENTS

Acetaldehyde	SC	Jet fuel	INT
Acetone	SP	Kerosene	INT
Butyl Acetate	INT	MEK	SP
Cyclohexane	INT	Methanol	IMM
Ethanol	IMM	Methyl Alcohol	IMM
Ethyl Acetate	IMM	Rubbing Alcohol	IMM
Ethyl Alcohol	IMM	Wood Alcohol	INT
Formaldehyde	INT	111 Trichloroethane	INT
Isopropyl Alcohol	IMM	Phenol	IMM

NOTE: This Chemical resistance chart is only a guide. Refer to TD.400 for additional chemical resistance guidelines.

Suggested Storage:

- Store in a temperature and weather-controlled area between 65° F / 18° C and 85° F / 29° C. Do not allow to freeze.
- Shelf Life: 1 year from date of manufacture.

Available Packaging: 3-gal, 15-gal, 150 gal.