

# CrownPro SolventShield

Product Description Sheet No. 351



## A PROTECTIVE FLOOR SYSTEM FOR SUBSTRATES REQUIRING SOLVENT PROTECTION OR COLD SUBSTRATE APPLICATION

### DESCRIPTION

**CrownPro SolventShield, Product No. 351** is a 100% solids, 100% reactive, moisture-insensitive, non-shrink, two-component, modified Aliphatic-Novolac epoxy formulated to adhere and cure on dry and damp concrete surfaces or dry steel surfaces.

### WHERE TO USE

Use an Anti-Corrosive Protective Coating for:

- Concrete Floors
- Tank Lining
- Drain Ditch Lining
- Secondary Containment Coating and Lining

### ADVANTAGES

- Applicable / Curable to 33°F
- Excellent Working Time
- Cures and Adheres on Dry or Damp Concrete Surfaces
- Excellent Chemical Resistance & Fast Cure
- Excellent Physical Strength Properties
- Excellent Solvent Resistance
- 100% Solids, No VOC's
- Low Odor During Application
- USDA and FDA Compliance
- Also Available in a ESD Formula

### TYPICAL DATA FOR CrownCote SolventShield

(Material and Curing Conditions at 73°F unless noted, 50% R.H.)

**COLOR** Pigmented                      **VISCOSITY** 700 – 1,600 cps.  
**POTLIFE** 12-20 minutes              **CONSISTENCY** Liquid

#### TACK-FREE TIME

Substrate Temperature	33°F	40°F	73°F
	10-12 hrs.	6-8 hrs.	4-5 hrs.

#### TENSILE PROPERTIES (ASTM D 638) 7 Days

Tensile Strength	7,800 psi
Elongation at Break	4-6 %
Modulus of Elasticity, psi	3.8 X 10 <sup>5</sup>

#### FLEXURAL PROPERTIES (ASTM D 790) 7 Days

Flexural Strength	13,800 psi
Modulus of Elasticity, psi	5.0 X 10 <sup>5</sup>

#### SLANT SHEAR STRENGTH (ASTM C 882) 7 Days

Test Temperature	Value	Mode of Failure
73°F	4,850 psi	100% Concrete Failure

#### COMPRESSIVE STRENGTH (ASTM D 695) 7 Days

Compressive Strength	10,900 psi
Compressive Modulus, psi	3.4 X 10 <sup>5</sup>

**HARDNESS** - Shore D (ASTM D2240) 7 Days 80

**60° SPECULAR GLOSS (ASTM D523)** 7 Days 98

**WATER ABSORPTION (ASTM D 570)** 24 Hours 0.21%

#### ABRASION RESISTANCE, WEIGHT LOSS (ASTM D4060)

1,000 cycles with Wheel No. 10, 1,000 grams	0.05
---	------

#### DEFLECTION TEMPERATURE (ASTM D 648) 7 DAYS

Fiber Stress Loading = 264 psi	148°F
--------------------------------	-------

**MAR RESISTANCE (ASTM D5178)** kg. 1.05

**SHELF LIFE** 2 years in Original Unopened Containers.

**PACKAGING** 4 - 1 Gallon Units / Case  
5 Gallon Pails

**STEEL PRIMER:** When a steel primer is required request CrownCote SolventShield, Product No. 440.1

# CrownPro Solvent Shield

## Contractor's Choice for Aggressive Solvent Environments

### **SURFACE PREPARATION**

Concrete and other substrates must be clean, sound, and free of standing water. Remove dust, grease, waxes, and coatings, curing compounds and all contaminants by mechanical means such as shot blasting. Abrasive blast all metal surfaces to white metal for best adhesion. Apply product before flash rusting develops or the cleaned concrete becomes contaminated.

### **TEST SUBSTRATE for ADHESION**

Before placement of the Epoxy Polymer Concrete, check the concrete and steel substrates for soundness and cleanliness with a Tensile Pull Test (ACI 503 R) or Shear Test. 100% concrete must fail to pass either test.

### **PRECONDITIONING EPOXY**

When temperatures drop, it becomes harder to apply product as when the temperatures are warmer. To improve the flowability on substrate temperatures below 55°F preheat each epoxy component to 90°F before mixing. Caution the potlife will be reduced by about 50%.

### **MIXING**

Pre-mix Component "A", (when pigmented) then pour Component "B" into "A" and mix for 90 seconds with a low speed paddle attached to a drill (400-600 rpm). Apply immediately.

### **PRIMING and MEMBRANES**

**Priming:** Typically priming the concrete surface is not necessary; when required use CrownPrime, Product No. 302.

**Membranes:** Membranes may be required on slabs with special waterproofing needs.

### **COVERAGE**

Product coverage is depended upon the existing substrate surface profile and thickness of the designed system. Refer to Crown Polymers Application Method Guide and Specifications.

### **APPLICATION METHODS**

Placement of product is typically by squeegee and rollers. Refer to Crown Polymers Application Method Guide and Specifications for detailed information.

### **LIMITATIONS**

- Minimum substrate and ambient temperature is 40°F.
- DO NOT THIN - solvents will prevent proper cure.
- Keep aggregate dry.
- Pre-condition epoxy as needed.
- When R.H. exceeds, 80% blush will occur. Wash and remove before application of next lift.

### **FIRST AID**

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. For respiratory problems, remove person to fresh air. Contact Physician Immediately. Wash clothing before re-use.

### **CAUTION**

**Before Using Read Material Safety Data Sheets.**

#### **Component "A" - Irritant -**

**Contains** epoxy resins. Prolonged contact with skin may cause irritation. Avoid contact with eyes.

#### **Component "B" - Corrosive -**

Contains aliphatic/cycloaliphatic amines. Contact with skin may cause severe burns. Avoid eye contact. Product is a strong sensitizer

#### **Component "C"**

**When used as an EPC** Contains silica sand. Avoid breathing product.

### **IMPORTANT INFORMATION**

Use of safety goggles, chemical-resistant gloves, adequate ventilation and NIOSH/MSHA approved respirator is recommended.

### **CLEAN-UP**

#### **Components "A" & "B" -**

Ventilate area. Control spills. Collect with absorbent material.

**Component "C" -** Ventilate area. Sweep or vacuum into appropriate containers.

#### **Disposal**

Dispose in accordance with current, applicable local, state, and federal regulations.

### **KEEP OUT OF REACH OF CHILDREN**

"Crown Polymers, LLC warrants its products to be free of manufacturing defects and that they will meet Crown Polymers current published physical properties when applied in accordance with Crown Polymers written directions and tested in accordance with ACI, ASTM and Crown Polymers Standards. There are no other warranties by Crown Polymers of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers, LLC 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, from any other cause whatsoever. Crown Polymers will not be responsible for use of this product in a manner to infringe on any patent held by others."

**For the Location of Your Nearest Crown Polymers Representative**



**CALL NATIONWIDE TOLL-FREE 1- 888 / 732-127**

USA Corporate Office & Factory

**Crown Polymers, LLC** 44 W 104 Route 20, Hampshire, IL 60140 USA Web Site: [www.crownpolymers.com](http://www.crownpolymers.com)

Fax: 847 / 683-0890 - Local Tel: 847 / 683-0800 – e-mail: [info@crownpolymers.com](mailto:info@crownpolymers.com)

PDS 351 Page 2 of 2

Revised July 2003