

# ARMORPRIME 100

## PRODUCT 734

### Epoxy Flooring System

#### PRODUCT DESCRIPTION

A straw colored 100% solids, two (2) component epoxy primer used over concrete substrates to promote adhesion and to seal old or new concrete to help prevent bubbles from occurring which are typically associated with concrete out-gassing. **ArmorPrime 100** has been specifically formulated for use as a prime coat under all Thermal-Chem base coats resurfacers and topcoats and can be applied over damp or dry substrates down to 40°F (4.4°C). This system can be applied in a thin mil coat or as thick as 20 mils. This non-amine blushing formulation can be mixed with a fine silica to aid in filling rough and uneven concrete substrates prior to the final application of **728 ArmorBond Resurfacer**, **731 ArmorClad Resurfacer** or **736 ArmorTred Resurfacer** top coats.

For best application results, pre-condition the material to between 80°F (27°C) and 90°F (32°F) if the substrate temperature is below 70°F (21°C).

**ArmorPrime 100** has been formulated for interior or exterior use, meets VOC regulations and is USDA approved. For best results against abrasion and chemical resistance, this primer should not be used without a topcoat application. It is available in normal and fast cure formulations and straw and pigmented colors.

Degrees		Recoat
<b>ArmorPrime 100</b>		
77°F	Normal Cure	6-7 hrs.
60°F	Normal Cure	10-11 hrs.
77°F	Rapid Cure	4-5 hrs.
60°F	Rapid Cure	7-8 hrs.

The above table assumes ambient temperature, material and substrate are equal and material is applied at 20 mils in thickness.

#### USES

Typical uses for the **ArmorPrime 100** include:

- Heavy traffic aisles with a top coat application
- Warehouse flooring with a topcoat application.

And, where the following qualities are required:

- Reduced out-gassing bubbles, due to porous and heavily abraded substrates
- As a prime coat under all Thermal-Chem base coats, resurfacers, topcoats and urethanes.
- When mixed with a fine silica aggregate, as a fill or leveling coat under one of the **Resurfacer** top coats
- Increased adhesion capabilities for all **Resurfacers**
- Volume mix ratio: 2:1

#### TYPICAL PHYSICAL PROPERTIES

Physical Characteristics	ArmorPrime 100 734
Hardness, Shore D ASTM D2240	80-85
Bond Strength ACI 503	>350 100% con. failure
Impact Resistance ASTM D2794	160 in./lbs
Abrasion Resistance ASTM D1044 Tabor Abrasion CS-17 Wheel 1000 gms. Load 1000 cycles	35-44 mg. loss
Viscosity 77 Degrees F.	600-800 cps

Viscosity 60 Degrees F.	1500-1800 cps
Compressive Strength	
ASTM D695	10,250
PSI 7 Day Cure	
Aggregate Filled	
Compressive Modulus	
ASTM D695	263,300
Flexural Strength	
ASTM D790	13,640
Modulus	389,100
Tensile Elongation	
ASTM D638	5.4%
Tensile Strength	8,940
Tensile Modulus	426,480
Freeze Thaw Resistance	300 Cycles
ASTM C666	Passes

### ADVANTAGES

- Available in colors
- Good resistance to most common chemicals
- Excellent adhesion to various substrates
- No offensive odors during application
- USDA approved product.
- Can be applied over moist or dry substrates

### LIMITATIONS

- Colors are tinted - not fully pigmented
- Limited substrate temperature range during application
- Requires a protective topcoat of any Thermal-Chem basecoat, resurfacer or topcoat
- Not suitable in areas of harsh chemical attack

### COLOR and TEXTURES

- Available in straw and 6 colors

- Typically a smooth, glass-like finish
- May be field pigmented using Thermal-Chem's ColorThane, a universal pigment.

(Various slip-resistant textures typically achieved with topcoat)

### PRODUCT APPLICATION

**ArmorPrime 100** can be applied over the **VaporGard Coating System** in applications where hydrostatic or vapor transmissions could be a potential hazard; and can be used with any of the Thermal-Chem complimentary and repair products; and can be applied as a:

- Neat system by squeegee and backrolling

Refer to appropriate Thermal-Chem product Installation Guide.

### PRODUCT AVAILABILITY

Products are manufactured and available through the Thermal-Chem Corporation, 2120 Roberts Drive, Broadview, IL 60155 U.S.A.

Tel: 800/635-3773 ▪ 847/288-9090

Fax: 847/288-9091

E-Mail: sales@thermalchem.com

Website: www.thermalchem.com

### TECHNICAL/SPECIFICATION SERVICES

Additional Product Data, complete Technical Support and Product Specifications are all available through Thermal-Chem Corporation; or their local representatives.

Every reasonable precaution and effort has been taken in the manufacturer of all Thermal-Chem products to comply with the published product data. Actual product performance may vary slightly due to environmental influences and/or conditions.

### PRODUCT HANDLING

Read the Material Safety Data Sheet thoroughly before use.



**Warning:** For professional use only. Avoid contact of uncured material with skin and eyes. Contact with skin may result in irritation. Wash skin with soap and water. If contact with eyes should occur, flush with water for 15 minutes and seek immediate medical attention.

#### LIMITED WARRANTY

Thermal-Chem Corporation warrants its product to be of good quality and will replace any product proved defective. Satisfactory results depend not only upon quality products but also upon many factors beyond our control. Therefore, except for such replacement, **THERMAL-CHEM CORP. MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS,** and Thermal-Chem Corporation shall have no other liability with respect thereto, including without limitation, liability for incidental or consequential damages. Any claim regarding product defect must be received in writing within one hundred and eighty (180) days from the date of shipment. No claim will be considered without such written notice or after the specified time interval. The user shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith.