

# ARMORFINISH E81

## PRODUCT 1061

### Two-Component Aliphatic Urethane

#### PRODUCT DESCRIPTION

**ArmorFinish E81** is an extremely high gloss, clear 81% solids, two-component ODOR FREE aliphatic urethane and is Thermal-Chem's best and most durable urethane coating. **ArmorFinish E81** provides excellent chemical, corrosion and abrasion resistant characteristics while providing superior gloss retention. **ArmorFinish E81** is a perfect polymeric coating system for interior or exterior applications where the finished surface may be exposed to high wear, abrasion and ultra-violet light.

**ArmorFinish E81** will cure to an extremely dense, molecular structure and to a smooth, glass-like finish and maintains superior gloss-retention qualities. An aggregate can be incorporated into the topcoat to achieve varying degrees of slip resistant textures as necessary or as may be desired.

**ArmorFinish E81** was been formulated specifically as a clear coat over other systems where long lasting abrasion resistance and gloss-retention is a requirement.

#### USES

Typical uses for the **ArmorFinish E81** include:

- As a top clear coat over epoxy or urethane floors in heavy traffic aisles and warehouse flooring
- As a top clear coat over epoxy or urethane floors in manufacturing facilities or plant floor surfaces
- Automotive repair shops
- Topcoat in aircraft hangers
- As a top clear coat over decorative flake and quartz where high traffic and abrasion exist and where gloss retention is a requirement

And, where the following qualities are required:

- Excellent abrasion resistance
- Good chemical resistance properties
- Excellent UV resistance
- Can be applied as glass-like smooth finish

#### ADVANTAGES

- Odor Free
- Excellent Gloss Retention
- Non-yellowing
- Mix ratio 1:3 by volume
- Excellent resistance to dirt and stains
- Two-component
- Resistant to Skydrol

#### LIMITATIONS

- Do not apply directly to wood
- Contains solvents and must be used in areas that are properly ventilated
- Cannot be applied at wet thickness' greater than 5.3 mils (300 sq. ft./gal.)
- Avoid storing at temperatures above 85°F
- Do not use over unprimed metal surfaces
- Do not apply over visible droplets, condensation or puddles of water
- Recoat time is critical
- Shelf life – 12 months unopened
- Do not apply directly to metal or over coatings that chalk or alkyd paints
- Do not apply within 10<sup>0</sup> F of the Dew Point
- If applied greater than maximum recommended wet mils, small white bubbles may occur
- Do not let the material puddle in low spots, joints or at the base of coves.
- Do not apply directly to concrete

#### TECHNICAL DATA

Temp.	Cure Time		Recoat Time
	Touch	Hard	
50-100°F*	4 hrs.	24 hrs.	8 - 12 hrs. max.
Solids by weight:		81% ± 2%	
Recommended Dry Film Thickness Coat:		3.7 to 3.2 mils (350-400 sq. ft./gal.)	

Maximum Wet Film: 5.3 mils  
(300 sq. ft./gal.)

## COLOR and TEXTURES

- Water clear only
- Available in a smooth, glass-like finish

## PRODUCT APPLICATION

- **ArmorFinish E81** may be applied with a squeegee and back rolled or by “dip and rolling”

Pour the B component into the A component. Mix for two to 3 minutes. Use extreme caution if mixing urethanes with an electric drill as **ArmorFinish E81** contains solvents and electric sparks may ignite solvent vapors. If using the squeegee and back roll method, spread the mixed material on the floor and squeegee the material to obtain the proper coverage. Back roll the material in two directions with a non-shedding ¼” or 3/8” nap roller. Avoid allowing the material to puddle. If the urethane is allowed to puddle in low spots, small white bubbles will appear and if allowed to flow into joints large foamy bubbles will occur.

If applying urethane over a DecoFlake or DecoQuartz flooring system use a 3/8” nap roller. The “dip and roll” method appears to yield the greatest success for application over these flooring systems.

Avoid applying **ArmorFinish E81** in high humidity conditions. The dew point must be at least 10°F below the air temperature. Always apply **ArmorFinish E81** in well-ventilated areas with air movement.

Recoat within 12 hours of prior application

## POTLIF

Always cover open containers. If the B Component is exposed to moist air and closed shelf life will be limited to less than one week.

## CHEMICAL RESISTANCE

Refer to Separate Product Chemical Resistance tables, or for specific product applications, contact your local Thermal-Chem representative.

## PRODUCT AVAILABILITY

Products are manufactured and available through the Thermal-Chem Corporation, 2550 Edgington Street, Franklin Park, IL 60131 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 its 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, at Thermal-Chem’s sole discretion, replace or refund the original purchase price (if payment was made in accordance with Thermal-Chem’s payment and

credit terms) of any product proved defective or non-conforming. Satisfactory results depend not only upon quality products but also upon many factors beyond our control. **THE PARTIES AGREE THAT THE REPLACEMENT OR REFUND OF PRODUCT PAYMENT FOR DEFECTIVE PRODUCT OR NON-CONFORMING GOODS IS THE SOLE AND EXCLUSIVE REMEDY.** 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 ninety (90) 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.