

# ZeraTuf™ W-102

## High Performance Clear Waterborne Urethane Coating

### DESCRIPTION

ZeraTuf™ W-102 is a high performance single-component self-crosslinking clear waterborne urethane coating for interior applications. It produces a highly durable hard surface with excellent abrasion, mar and scuff resistance. It is available in high gloss and satin finishes.

### WHERE TO USE

ZeraTuf™ W-102 is designed primarily as a clear topcoat for interior applications over 100 % solids epoxy floors or over ZeraPrime W-30FS (fast setting waterborne epoxy primer). Typical areas of use include restaurants, bars, studios, lofts, showrooms, retail stores, shopping malls, offices, hotel lobbies, casinos, public buildings and residential floors. It is the ideal product for use on concrete countertop over a clear epoxy coating such as ZeraKlear™.

ZeraTuf™ W-102 is also suited for sport floors/gymnasiums and for protection of the industrial zoning yellow line paints from rubber marks, dirt and traffic abrasion.

ZeraTuf™ W-102 is also ideal for applications to internal wood furniture as well as hardwood floors.

### BENEFITS

- Not toxic, low odour; contains no volatile solvents, isocyanate or other hazard materials
- Fast drying; multiple coats per day
- Excellent adhesion to epoxy primers & coatings
- Resistant to black heel or rubber burn marks
- Superior scuff and scratch resistance
- Resistant to hot tire pickup
- Flexible with high impact resistance
- Resistant to UV, stains, caustic, water and cleaners
- Ideal for “do it yourself” for wood floors and furniture
- Easy to clean and maintain with water and detergents
- **Approved by the “Canadian Food Inspection Agency” to be used in food processing facilities**

### Handling Properties (Tested @ 23°C (74°F))

Application Temperature . . . 12°C- 30°C (54°F-86°F)

Density Kg/litre (lb/US gal) . . . . .	1.04 (8.7)
Solids . . . . .	30 %
Tack free time, minutes . . . . .	30-60
Re-coat time, hours . . . . .	2-3
Light foot traffic . . . . .	4 hours
Full cure/ normal traffic . . . . .	3 days

### DATA - Cured Film (All tests are conducted after 7 days cure @ 23°C/74°F)

Sward Hardness . . . . .	36
VOC, g/l . . . . .	192
Gloss:	
High gloss . . . . .	88-90°
Satin finish . . . . .	28-30°
Matte finish . . . . .	8-10°
Pull Out Tensile Adhesion (to epoxy coating) (ASTM D4541) . . . . .	over 5 MPa (725psi)
Concrete failure	
Abrasion Resistance (ASTM D4060) . . . . .	32 mg loss
(Taber Abrasion, CS-17 Wheel, 1000 Cycles)	
Impact Resistance . . . . .	pass 160 in/Ib.
(ASTM D2794)	
Scratch Resistance . . . . .	89
(200 scrubs with a weighted abrasive pad, 100= no change in gloss)	
Finger-nail Resistance . . . . .	8
(10= no scratch marks)	
Black Heel Resistance . . . . .	8
(Pendulum Scuff Test, 10= no scuff marks)	

### Chemical & Stain Resistance:

The product has excellent over all resistance to household chemicals. Please refer to chemical resistant chart.

### APPLICATION:

#### Concrete:

New concrete must be cured for a minimum of 28 days (or 7 days using ZeraPrime W-30FS) before applying a 100 % solids epoxy primer/coating. The substrate must be above 12°C (54°F) and must be dry and free of all dirt, waxes, previously applied coatings, oil, grease,

laitance and any foreign matter that may interfere with the bond of the coating to the substrate. Cracks and surface defects should be repaired prior to the application of coating (for clear application use ZeraBond Type 3). Concrete surfaces to be coated should be shot blasted or mechanically abraded to provide a clean tooth for the coating.

Apply **ZeraTuf™ W-102** with a roller, spray or brush. A spray technique offers the best performance for film consistency, lack of roll marks and a smoother finish. For spray applications, **ZeraTuf™ W-102** may be thinned with water (5% by volume) to a viscosity of 22 sec (Din cup #4, nozzle size 1.8- 2.0 mm and atomizing air 2.8-3.2 bar) before applying the first coat. Allow the surface to dry, sand it, then apply the topcoat.

For roller applications, use a lint free 9 mm nap roller and back roll the applied material to provide an even coat. Two coats are recommended at a 5 mils wet film thickness. Apply the second coat in the same manner as the first.

### **Curing:**

The finished floor will take normal foot traffic after overnight drying but may remain susceptible to marking by furniture or heavy traffic until fully cured for 3 days after application. **Do not cover the coating until fully cured. (minimum 3 days)**

### **LIMITATIONS**

- We recommend that **ZeraTuf™ W-102** must be used over a concrete floor in conjunction with a 100 % solids epoxy primer/coating or ZeraPrime W-30FS for optimal performance
- Do not use over white surfaces as the product has inherited light amber colour
- Do not use over old painted or sealed floor without testing the adhesion beforehand
- You must use in a well ventilated area
- You must use within 24 hours of applying the epoxy otherwise the floor must be sanded to ensure good adhesion
- If **ZeraTuf™ W-102** is to be used in multiple coats, it should be done in the same day, otherwise light sanding or warm water/detergent wash is needed
- Do not use in areas of high humidity or condensation
- A minimum temperature of 12°C (54°F) is needed during the application and drying
- As a thin film, it is not recommended for heavy duty vehicular traffic

### **TROUBLE SHOOTING**

**Slow dry or clearing:** Low curing temperatures; high humidity; lack of ventilation after application.

**Streaks:** Product applied too thin.

**Fish eyes:** A foreign material on the surface, like oil, grease, or silicone.

**Bubbling:** Overworking the product with applicator: shaking the finish before applying; or, high temperatures during application.

**Peeling:** Improper floor preparation.

**Dirt particles:** Applicator not “de-fuzzed” causing loose fibers in the film; or, room vents not sealed during the application.

**Screen marks:** Using too aggressive a screen between coats.

**Hazy film:** High humidity during drying.

### **COVERAGE**

A two coat application (over primer) is required in most applications.

Roller: 7.5 m<sup>2</sup>/L (300ft<sup>2</sup>/U.S. gallon) per coat

Spray: 12.5m<sup>2</sup>/L (500ft<sup>2</sup>/U.S. gallon cut 5% by volume)

### **PACKAGING**

3.79 litre (1 U.S. gal)

18.9 litre (5 U.S. gal)

### **CLEAN UP**

Clean up all equipment with water.

### **STORAGE**

Protect from freezing. Store under normal heated warehouse conditions.

### **WARRANTY**

“The recommendations made and the information herein is the result of accurate laboratory and field tests under controlled conditions. We guarantee that the quality and properties of the materials supplied conform to our standards. Zeraus Products Inc. makes no warranties, expressed or implied, as uses and applications are beyond our control. Zeraus Products Inc. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

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