



Product Information Sheet

ESI 4000 Water Based Epoxy Primer/Sealer

PRODUCT DESCRIPTION

ESI 4000 Water Based Epoxy Primer/Sealer is an economical clear concrete sealer that will outperform other water-based acrylic or acrylic/urethane sealers in both chemical resistance and wear. It has a low viscosity which allows ESI 4000 to flow smoothly, making it easy to spread and roll out evenly.

ESI 4000 is suitable for applications as a primer on damp concrete, providing excellent adhesion of polyurethane and epoxy topcoats. ESI 4000 Water Based Epoxy Primer/ Sealer is ready for foot traffic 6-8 hours after application, at room temperature.

ADVANTAGES

- Penetrating
- Acceptable for use in USDA inspected facilities
- Acceptable for use in Canadian Food Processing facilities, categories: D1, D2, D3 (Confirm acceptance of specific part numbers with your SW Sales Representative)
- Can be applied to green concrete
- Excellent adhesion to concrete or wood
- Breathable
- Long pot life
- Reduces concrete dusting
- Easy to spread
- Suitable for use on damp (not wet) concrete
- Fast cure time

TYPICAL USES

ESI 4000 is used as a sealer for concrete and wood substrates and as a primer for certain ESI coating systems.

LIMITATIONS

- Substrate must be structurally sound, dry and free of bond inhibiting contaminants.
- During installation and initial cure cycle substrate and ambient air temperature must be at a minimum of 50°F (10°C). Substrate temperature must be least 5°F (3°C) above the dew point (for lower temperature installation.
- When required, adequate ventilation and proper clothing shall be provided.
- Strictly adhere to published coverage rates.

SURFACE PREPARATION

Proper inspection and preparation of the substrate to receive resinous material is critical. Read and follow the "Instructions for Concrete Surface Preparation" (Form G-1) for complete details.

PRODUCT CHARACTERISTICS

Colour:	Clear
Mix Ratio:	2:1
Volume Solids:	31% ± 2%, mixed
Weight Solids:	31% ± 2%, mixed
VOC (EPA Method 24):	Unreduced: <75 g/L mixed; 0.63 lb/gal as applied
Viscosity, mixed:	40 cps

Recommended Spreading Rate per coat:

	Minimum		Maximum	
Wet mils (microns):	2	(50)	4.5	(113)
~Coverage sq ft/ gal (m²/L):	800	(20.3)	350	(8.9)

Drying Schedule @ 4.5 mils (113 microns) wet:

@ 73°F (23°C)

To touch: 1-4 hours

To recoat: 2-5 hours

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent.

Pot life: gallon mass 6-8 hours @ 73°F (23°C)

Shelf Life: Part A: 12 months, unopened
Part B: 12 months, unopened
Do not allow materials to freeze.
Store indoors at 50°F (10°C) to 90°F (32°C)

Flash Point: >200°F (>93°C), ASTM D 93, mixed



PERFORMANCE CHARACTERISTICS

Test Name	Test Method	Results
Adhesion to Concrete		Excellent
Resistance to Moisture		Excellent
Surface Burning*	ASTME84/ NFPA255	Flame Spread Index 20; Smoke Development Index 90
Thermal Shock		Excellent

ESI 4000 at 1.5 mils (40 microns) DFT topcoated with ESI 5745 at 17.5 mils (438 microns) DFT

APPLICATION

Application Instructions

1. Premix ESI 4000 A (resin), using a low speed drill and Jiffy blade. Mix for one minute and until uniform, exercising caution not to whip air into the materials.
2. Add 2 parts ESI 4000 A (resin) to 1 part ESI 4000 B (hardener) by volume. Mix with low speed drill and Jiffy blade for three minutes and until uniform. DO NOT mix more material than can be used within 4 hours.
3. Apply material with a 3/8" nap roller at a spread rate of 400 sq. ft. per gallon.

If a second coat is required or used as a sealer, the application rate should be 500-600 sq. ft. per gallon. Due to the first coat sealing the surface, the second coat may crawl or separate, wait 15-20 minutes and roll again.

DO NOT ALLOW TO PUDDLE. Any uneven or textured surfaces will require more material than an even surface.

4. Allow to cure 4-6 hours.

ORDERING INFORMATION

Packaging:

Part A:	1 gallon (3.8L) and 5 gallon (18.9L) containers
Part B:	1 gallon (3.8L) and 5 gallon (18.9L) containers
Weight:	8.7 ± 0.2 lb/gal; 1.04 Kg/L mixed, may vary by colour

CLEANUP

Clean up mixing and application equipment immediately after use with soap and water.

SAFETY

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact Epoxy Solutions for additional technical data and instructions.

MAINTENANCE

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact Epoxy Solutions.

SHIPPING

- Georgetown, Ontario, Canada

For specific information relating to international shipments, contact your local sales representative.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of Epoxy Solutions.

Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Epoxy Solutions representative to obtain the most recent Product Data Information.

WARRANTY

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