

ECCOCRYL S5191

SELF CROSS-LINKING ACRYLIC EMULSION

ECCOCRYL S5191 is a self cross-linking acrylic which is suitable for a wide variety of applications ranging from concrete to wood and even paper. It can be formulated into a < 50 g/l interior and exterior wet-look sealer. The finish is non-blushing, non-yellowing and exhibits excellent wet adhesion, chemical and stain resistance properties.

KEY BENEFITS

- Non-blushing
- Stops efflorescence
- < 50 g/l sealers
- Wet adhesion

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TYPICAL PROPERTIES*

Appearance	Translucent White
pH.....	7.5
Solids, % by Weight	41
Viscosity, cps @ 25°C	< 200
Density, lbs/gal	8.7
% VOC	0.1
Tg °C	6
Acid Number	42
Freeze/Thaw Stability	Fails
König Hardness (secs).....	47

*These values should not be interpreted as specifications.



The Spark of Innovation

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Starting Point Formulation - ALW063

Materials	Pounds
ECCOCRYL S5191	608.00
Dynol 800	2.90
<i>Pre-blend water and solvent, then add.</i>	
Water	380.70
Dipropylene Glycol Butyl Ether	7.90
Tego Foamex 825	0.50
Total:	1000.00

Formulation Attributes

Solids, % by weight	25
pH.....	7.95
Viscosity (CPS)	<50
VOC (g/L).....	46.1
Wt/gal	8.49

Performance Information

Tests performed on CRS panels (1-mil dry).

Konig Hardness (seconds):	1 day - 31	7 day - 47
Cross Hatch Adhesion (7 Day):	Dry - 5B	Wet - 4B

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Stain & Chemical Resistance Properties

Tested after 7 days, 1 Hour Test, 1 Hour Recovery

Stain Testing

Coffee	No Effect
Red Wine	No Effect
Ketch-up	No Effect
Mustard	Slight Yellowing/Recovers
Iodine 7.5%	No Effect

Chemical Testing

Water	No Effect
Motor Oil	No Effect
NaOH 10%	Slight Softening/Recovers
NaCl 10%	No Effect
CaCl ₂ 10%	No Effect
TSP 3%	Moderate Softening/Recovers
Ammonia 10%	Slight Softening/Recovers
HCl 5%	No Effect
Brake fluid	No Effect
EtOH 50%	Moderate Softening/Recovers
Gas	Slight Softening/Recovers
Skydrol	Moderate Darkening & Softening/Does Not Recover

Water Resistance Testing – Comparative Study

Procedure – 2 coats of sealer are applied to a red quarry tile. The coats are allowed to dry for 2 hours. After the second coat is dried the tile is partially submersed into water for 16 hours.

The pictures below show the results. As you can see R5191/ALW063 compares very favorably to the typical solvent-based wet look sealer and out performs an existing commercially available water-based sealer.



Solvent-based
wet look sealer



S5191/ALW063



Water-based sealer

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Efflorescence Testing Procedure:

Substrate:

- Porous fireplace bricks

Testing Procedure:

- Cover bottom inch of all sides of brick with masking tape.
- Use sponge applicator to coat brick completely on top and 4 sides above masking tape.
- After 1 hour of dry/cure time, apply a 2nd coat.
- Allow 1 day cure, at room temperature.
- Remove masking tape.
- Prepare a ~26% salt water solution.
- Place coated bricks in a stainless steel or plastic pan and fill to the coating line with the saturated salt solution.
- Monitor solution level daily and keep level at the coating line.
- Compare efflorescence each day. End test at 7 days.

S5191

Acrylic/Styrene Acrylic Polymer

