

### CHEMICAL AND STAIN RESISTANCE TESTING

#### General Chemical Resistance

Product	Dilute Acids (less than 30%)	Concentrated Acids (30% or more)	Weak Alkalis	Strong Alkalis	Chlorinated Solvents Aldehydes + Ketones Esters
SpecLite 3® FRP	G to E	G to E	G	E	G to E

KEY | E=excellent, G=good, F=fair (test before using), P=poor, not recommended

#### Resistance to Specific Chemicals

##### TESTING INFORMATION

- Ratings are based on visual observations
- Tests were run per Crane Composites PD procedure #8125 Surface Chemical Resistance. In this procedure the chemicals are exposed to the surface of the panel for 7 days.

##### GENERAL NOTES

- Ratings are based on a combination of visual observations, and mechanical strength test results.
- All testing was done at 77°F +/- 10°F. Performance ratings are not necessarily valid outside of that temperature range.
- Test ratings are based on white material; non-white panels could show additional visual changes.
- **Test was run according to ASTM D-543, requiring total immersion of samples. Actual results may be better than published since only the SpecLite 3®/Surfaseal finish will be exposed in atypical installation. SpecLite 3® FRP finish has exhibited up to 6 times the stain resistance of standard FRP.**

##### RATING KEY

- E (Excellent): Suitable for use in most exposure conditions.
- G (Good): Probably suitable for use; testing under specific exposure conditions is suggested.
- F (Fair): Possibly unsuitable for use; testing under specific exposure conditions is recommended.
- P (Poor): Unsuitable for use in most exposure conditions.
- C: Color change
- NT: Not tested

Chemical	Rating	General Comments
Acetic Acid, Concentrated	E	
Acetic Acid, 5%	E	
Ammonium Hydroxide, Concentrated	E	
Ammonium Hydroxide, 10%	C	Caused to turn yellow
Aniline	P	Caused to turn yellow
Bleach Solution	C	Caused to turn yellow
Citric Acid, 10%	E	
Detergent Solution	C	Caused to turn yellow
Distilled Water	E	
Ethyl Acetate	P	
Ethyl Alcohol, 95%	C	Caused to turn yellow
Ethyl Alcohol, 50%	G	
Formaldehyde	E	
Heptane	F	
Hydrochloric Acid, 10%	E	
Hydrochloric Peroxide, 3%	C	Caused to turn yellow
Isooctane	G	
Lactic Acid, 10%	E	

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Chemical	Rating	General Comments
Mineral Oil	E	
Nitric Acid, 40%	E	
Nitric Acid, 10%	E	
Oleic Acid	G	
Olive Oil	E	
Potassium Iodide Solution, 10%	E	
Soap Solution	E	
Sodium Chloride Solution, 10%	P	Caused to turn yellow
Sodium Chloride Solution, 60%	P	
Sodium Hydroxide Solution, 10%	P	Caused to turn yellow
Sodium Hydroxide Solution, 1%	P	Caused to turn yellow
Sodium Hydroxide Solution, 4-6%	E	
Sulfuric Acid, 30%	G	
Sulfuric Acid, 3%	G	
Toluene	G	Caused to turn yellow
Transformer Oil	G	
Turpentine	G	

## Stain Resistance to Food + Miscellaneous Products

### KEY

- Unaffected = wipes off easily with damp cloth and mild soap; no color or surface change
- Superficial = stain removes easily with water and/or mild abrasive
- Considerable = stain not completely removed.

### TESTING INFORMATION

- ASTM D2299 | test stain resistance of applied coating
- ASTM D1308 | test stain resistance of a product's natural surface

Stain (ASTM D2299)	Results (test #1)	Results (test #2)
Blood (beef)	Superficial	Superficial
Brown Shoe Polish	Considerable	Considerable
Butter	Unaffected	Unaffected
Crayon	Superficial	Superficial
Mustard	Unaffected	Superficial
Oil (crankcase)	Superficial	Superficial
Potatoes (white)	Unaffected	Unaffected
Red Cabbage	Unaffected	Unaffected
Tea	Unaffected	Unaffected
Tomato Acid	Unaffected	Unaffected

**CRANE**

Composites

Technical Data provided by CRANE COMPOSITES. Special-Lite is proud to partner with Crane Composites who engineered SpecLite3® FRP - a proprietary product also referred to as Glasbord with Surfaseal.

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