CRANE Composites

hydewa

# CHEMICAL AND STAIN RESISTANCE TESTING

## GENERAL CHEMICAL RESISTANCE

| Products | Dilute Acids (less than 30%) | Concentrated Acids (30% or more) | Weak Alkalis | Strong Alkalis | Chlorinated Solvents Aldehydes + Ketones Esters |
|---|---|---|---|---|---|
| Glasbord Products<br>Sequentia Products | G to E | G to E | E | G | G to E |

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

## Resistance to Specific Chemicals

### 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 per Crane Composites product development procedure #8125: surface chemical resistance. In this procedure the chemicals are exposed to the surface of the panel for 7 days.

### 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 | Glasbord | Sequentia | Sanigrid | General Comments |
|---|---|---|---|---|
| Acetic Acid, Concentrated | E | P | E | Caused Sequentia panels to turn yellow and erode |
| Acetic Acid, 5% | E | E | E | |
| Ammonium Hydroxide, Concentrated | E | C | C | Caused Sequentia + Sanigrid to turn yellow |
| Ammonium Hydroxide, 10% | C | C | C | Caused all to turn yellow |
| Aniline | P1 | P | C | Caused all to turn yellow |
| Bleach Solution | C | C | E | Caused Glasbord + Sequentia to turn yellow |
| Citric Acid, 10% | E | E | C | Caused Sanigrid to turn yellow |
| Detergent Solution | C | E | E | Caused Glasbord + Sequentia to turn yellow |
| Distilled Water | E | E | E | |
| Ethyl Acetate | P[1] | P | E | |
| Ethyl Alcohol, 95% | C | G | NT | Caused Glasbord + Sequentia to turn yellow |
| Ethyl Alcohol, 50% | G[1] | E | NT | Caused Sequentia panels slight reduction in strength |
| Formaldehyde | E | E | E | |
| Heptane | F | G | E | Caused Sequentia panels slight reduction in strength |
| Hydrochloric Acid, 10% | E | E | E | |
| Hydrochloric Peroxide, 3% | C | E | E | Caused Glasbord + Sequentia to turn yellow |
| Isooctane | G1 | G | E | Caused Sequentia panels slight reduction in strength |
| Lactic Acid, 10% | E | E | E | |

## CHEMICAL + STAIN RESISTANCE TESTING

| Chemical | Glasbord | Sequentia | Sanigrid | General Comments |
|---|---|---|---|---|
| Mineral Oil | E | E | G | Sanigrid absorbed some oil |
| Nitric Acid, 40% | E | G | C | Sanigrid turned slight yellow/blue |
| Nitric Acid, 10% | C | E | C | Sanigrid turned slight yellow/blue<br>Caused Sequentia panels slight reduction in strength |
| Oleic Acid | G[1] | E | G | Sanigrid absorbed some oil |
| Olive Oil | E | E | G | Sanigrid absorbed some oil |
| Potassium Iodide Solution, 10% | E | C | G | Sanigrid turned red \| Sequentia turned yellow |
| Soap Solution | E | E | C | |
| Sodium Chloride Solution, 10% | P[1] | E | E | Caused Glasbord + Sequentia to turn yellow |
| Sodium Chloride Solution, 60% | P | G | E | Caused Sequentia panels slight reduction in strength |
| Sodium Hydroxide Solution, 10% | P | NT | E | Caused Glasbord + Sequentia to turn yellow |
| Sodium Hydroxide Solution, 1% | P | NT | E | Caused Glasbord + Sequentia to turn yellow |
| Sodium Hydroxide Solution, 4-6% | E | NT | E | |
| Sulfuric Acid, 30% | G1 | G | NT | Caused Sequentia panels slight reduction in strength |
| Sulfuric Acid, 3% | G[1] | E | E | |
| Toluene | G1 | P | E | Caused Glasbord + Sequentia to turn yellow |
| Transformer Oil | G[1] | NT | NT | Sanigrid absorbed some oil |
| Turpentine | G1 | E | 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) | Glasbord (ASTM D2299) | Glasbord (ASTM D1308) | Sequentia (ASTM D1308) |
|---|---|---|---|
| Blood (beef) | Superficial | Superficial | Superficial |
| Brown Shoe Polish | Considerable | Considerable | Considerable |
| Butter | Unaffected | Unaffected | Unaffected |
| Crayon | Superficial | Superficial | Superficial |
| Mustard | Unaffected | Superficial | Superficial |
| Oil (crankcase) | Superficial | Superficial | Superficial |
| Potatoes (white) | Unaffected | Unaffected | Unaffected |
| Red Cabbage | Unaffected | Unaffected | Unaffected |
| Tea | Unaffected | Unaffected | Unaffected |
| Tomato Acid | Unaffected | Unaffected | Unaffected |

A global leading provider of resilient wall and ceiling coverings. Kemlite® was established in 1954 and the company changed names to Crane Composites in 2007. Crane Composites is headquartered in Channahon, IL and all our products are manufactured in the United States. We work with hundreds of distributors, ensuring our products are easily accessible and readily available to our customers.

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