

Project Planning

CHEMICAL RESISTANCE GUIDE

Results reported serve as a general guide to aid KRETUS® trained and qualified professionals when selecting KRETUS® products.

KEY:

1 - Recommended for best chemical resistance:

Chemical has no adverse effect on coating; remove chemical within 24 hours.

2 - Low potential for stain: Chemical has no adverse effects on coating if removed within 24 hours.

3 - High potential for stain or degradation: Chemical must be removed within 24 hours of exposure.

NR - Not recommended

NOTE: Pigments or colorants may reduce coatings' chemical resistance or increase potential for stain. Coatings tested at ambient temperature over 1-3 days' exposure to chemical. Before completing an installation, products should be tested for chemical resistance on site. Special cases may be tested upon request for an additional fee.

| CHEMICAL | TOP SHELF® (CR-RESIN + AP, FAST, or MVR-FC) | OTHER TOP SHELF® EPOXY & EZ PATCH | POLYURETHANE HP | POLYASPARTIC & POLYURETHANE HS | URETHANE POLYMER CONCRETE | ACRYLIC SEALER |
|----------------------------------------------------|---------------------------------------------|-----------------------------------|-----------------|--------------------------------|---------------------------|----------------|
| Acetic Acid (vinegar component), 10% | 1 | 1 | 1 | 1 | 1 | 1 |
| Acetic Acid, 30% | 1 | 2 | 2 | 2 | 2 | NR |
| Acetone | NR | NR | 1 | 1 | 1 | NR |
| Ammonia, 30% | 1 | 1 | 1 | 1 | 1 | NR |
| Ammonium Hydroxide, 30% | 1 | 1 | 1 | 1 | 1 | NR |
| Antifreeze (coolant) | 1 | 1 | 1 | 1 | 1 | 2 |
| Benzene (crude oil component) | 3 | 3 | 1 | 1 | 3 | 3 |
| Benzyl Alcohol | 1 | 3 | 1 | 1 | 3 | NR |
| Betadine, 11% | 3 | NR | 1 | 1 | 2 | NR |
| Bleach | 1 | 1 | 1 | 1 | 3 | 3 |
| Boric Acid, 4% | 1 | 1 | 1 | 1 | 3 | NR |
| Brake Fluid, DOT 3 | 1 | 1 | 1 | 1 | 1 | 1 |
| Chromic Acid, 10% | 1 | 3 | 1 | 1 | 1 | 3 |
| Chromic Acid, 30% | 2 | 3 | 1 | 1 | 1 | NR |
| Citric Acid, 30% | 1 | 1 | 1 | 1 | 1 | 1 |
| Ethanol, 95% | 3 | NR | 1 | 1 | 3 | NR |
| Ethyl Acetate, 99% (food/beverage facility) | NR | NR | 1 | 1 | NR | NR |
| Formaldehyde, 37% | 2 | 3 | 2 | 3 | 2 | NR |
| Premium Gasoline | 1 | 1 | 1 | 1 | 1 | 1 |
| Hydraulic Fluids (machinery, automobile, aviation) | 1 | 2 | 1 | 2 | 1 | 2 |

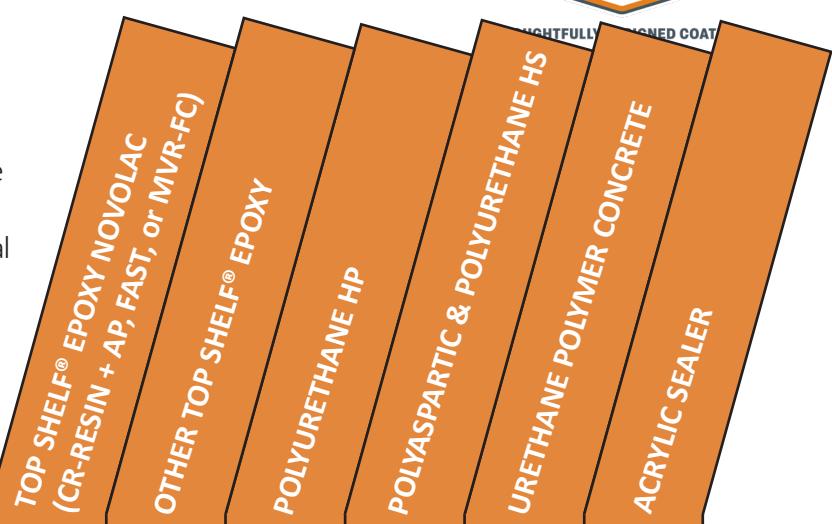
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|-------------------------------------------------------------------|---------------------------------------------------|------------------------|-----------------|--------------------------------|---------------------------|----------------|
| Hydrochloric Acid, 10% | 1 | 3 | 1 | 1 | 1 | 3 |
| Hydrochloric Acid, 30% | 3 | 3 | 3 | 3 | 1 | 3 |
| Hydrofluoric Acid, 10% | 1 | 1 | 1 | 1 | 1 | NR |
| Hydrofluoric Acid, 30% | 3 | 3 | 3 | 3 | 1 | NR |
| Hydrogen Peroxide, 10% | 1 | NR | 1 | 1 | 1 | NR |
| Hydrogen Peroxide, 50% | 1 | NR | 1 | 1 | 3 | NR |
| Iodine, 2% | 3 | 3 | 3 | 3 | 3 | 3 |
| Isopropyl Alcohol | 1 | 3 | 1 | 2 | 1 | NR |
| Jet Fuel | 1 | 1 | 1 | 1 | 1 | 1 |
| Lactic Acid, 30% (dairy facility) | NR | NR | 1 | 3 | 1 | NR |
| Lime Juice | 2 | 2 | 1 | 1 | 1 | 2 |
| Magnesium Hydroxide | 1 | 1 | 1 | 1 | 1 | 1 |
| MEK (Methyl Ethyl Ketone) | 3 | NR | 1 | 1 | NR | NR |
| Methanol | NR | NR | 1 | 1 | NR | NR |
| Methylene chloride | NR | NR | NR | NR | 3 | NR |
| MIBK (Methyl Isobutyl Ketone) | NR | NR | 1 | 1 | NR | NR |
| Mineral Oil | 1 | 1 | 1 | 1 | 1 | 1 |
| Motor Oil, SAE 30 | 1 | 1 | 1 | 1 | 1 | 1 |
| Mineral Spirits | 1 | NR | 1 | 1 | NR | NR |
| Mustard, yellow | 1 | 2 | 1 | 1 | 3 | 3 |
| Nitric Acid, 30% | 1 | NR | 1 | NR | 2 | NR |
| Oleic Acid | 1 | 1 | 1 | 1 | 1 | 1 |
| Oxalic Acid, 10% | 1 | 1 | 1 | 1 | 1 | 1 |
| Phosphoric Acid, 20% | 1 | 3 | 1 | 2 | 1 | NR |
| Potassium Hydroxide, 30% (alkaline batteries, soap manufacturing) | 1 | 1 | 1 | 1 | 1 | 3 |
| Propylene Glycol | 1 | 1 | 1 | 1 | 1 | 1 |
| Silver Nitrate, 20% (photo labs) | 3 | 3 | 1 | 3 | 3 | NR |

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|---------------------------------------------------|---------------------------------------------------|------------------------|-----------------|--------------------------------|---------------------------|----------------|
| Hydraulic Fluid (aviation), Skydrol LD-4 | 2 | 2 | 1 | 2 | 2 | NR |
| Sodium Chloride, 20% | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium Hydroxide (caustic soda), 50% | 1 | 1 | 1 | 1 | 1 | 1 |
| Sodium Hypochlorite, 10% (bleach) | 1 | 2 | 1 | 1 | 2 | NR |
| Sodium Hypochlorite, 30% (bleach) | 3 | 3 | 2 | 2 | 2 | NR |
| Sodium Persulfate (bleaching and oxidizing agent) | 3 | 3 | 3 | 3 | 2 | 3 |
| Sulfuric Acid, 37% (battery acid) | 2 | NR | 1 | 2 | 1 | NR |
| Tannic Acid, 20% | 3 | 3 | 2 | 3 | 2 | 3 |
| Tartaric Acid, 10% | 1 | 1 | 1 | 1 | 1 | 3 |
| Transmission Fluid | 1 | 1 | 1 | 1 | 1 | 2 |
| Urine (dog and cat) | 1 | 1 | 1 | 1 | 1 | 2 |
| Urea (nitrogen-rich fertilizer) | 1 | 1 | 1 | 1 | 1 | 1 |
| Vinegar, distilled | 1 | 1 | 1 | 1 | 1 | 1 |
| Water (hard water from well) | 1 | 1 | 1 | 1 | 1 | 1 |
| Whisky | 1 | 1 | 1 | 1 | 1 | 2 |
| Wine, cabernet sauvignon | 1 | 2 | 1 | 1 | 1 | 2 |
| Xylene | 3 | 3 | 1 | 1 | 3 | NR |

DISCLAIMER: The information contained in this document is intended for use by KRETUS® qualified and trained professionals. This is not a legally binding document and does not release the specifier from his/her responsibility to apply materials correctly under the specific conditions of the construction site and the intended results of the construction process. The most current valid standards for testing and installation, acknowledged rules of technology, as well as KRETUS® technical guidelines must be adhered to at all times. The steps given in this document and other mentioned documents are critical to the success of your project.