

# Chemical Resistance Data Sheet



**Fulcrum\* Thermoplastic Composite Products** are produced with a proprietary rigid engineering thermoplastic polyurethane matrix. The combination of ductile thermoplastic matrix with high strength continuous fibers results in excellent strength and stiffness combined with superior toughness. The resin offers excellent resistance to a broad range of chemicals, including acids, bases and organic liquids.

The following data, comparing pultruded Fulcrum Composite with a pultruded composite with a Vinyl Ester matrix was tested by Dow Chemical.

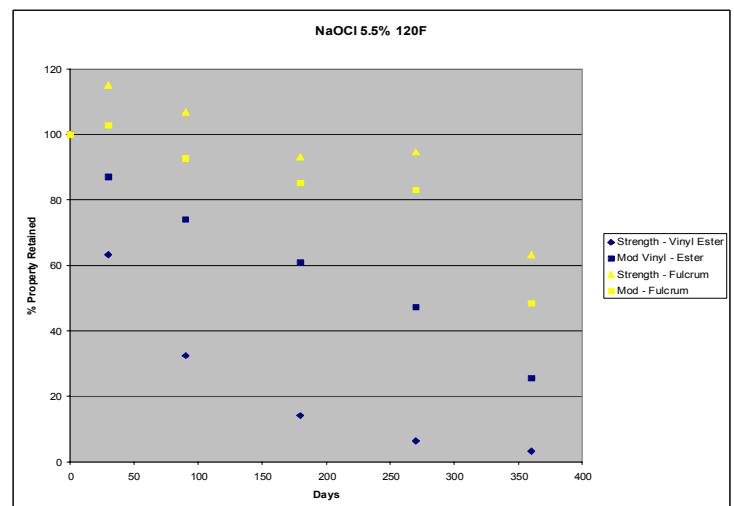
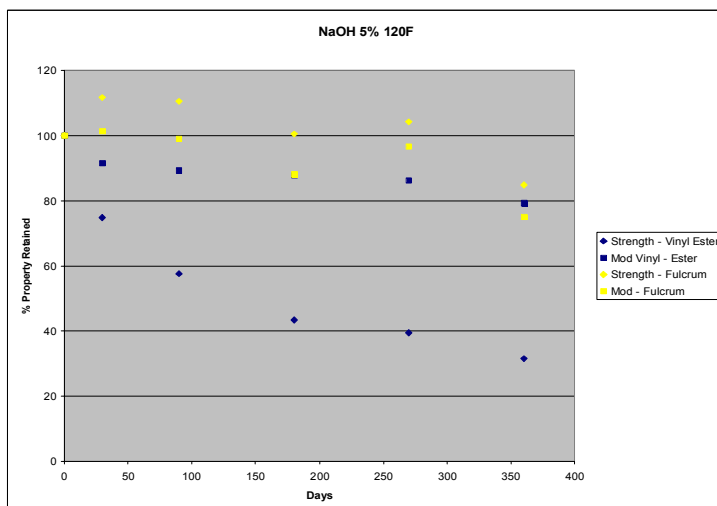
- Test Specimens:
  - Fulcrum samples pultruded, 75% uniaxial roving, section 2mm x 22mm, standard Fulcrum resin
    - » Initial strength 142 kpsi, initial modulus 5.9 mpsi
  - VE samples pultruded, 80w% uniaxial roving, section 2mm x 22mm, D 640-900 resin
    - » Initial strength 203kpsi, initial modulus 7.7 mpsi
- All specimens immersed in test solutions at 120F, all specimens edge sealed

## Notes for use

This data is supplied for information purposes only. It represents the performance of a single set of test specimens under a single set of test conditions and is not necessarily indicative of all configurations. As with all composite products the performance in the final application is influenced by a number of factors including – load, duration, temperature, environment. It remains the responsibility of the end user to determine the suitability of these products under end use conditions.

This data was tested on samples with no external coating. Fulcrum may have a cap layer of unfilled polymer applied during production. This cap layer can further enhance properties, including chemical resistance.

## Resistance to Bases



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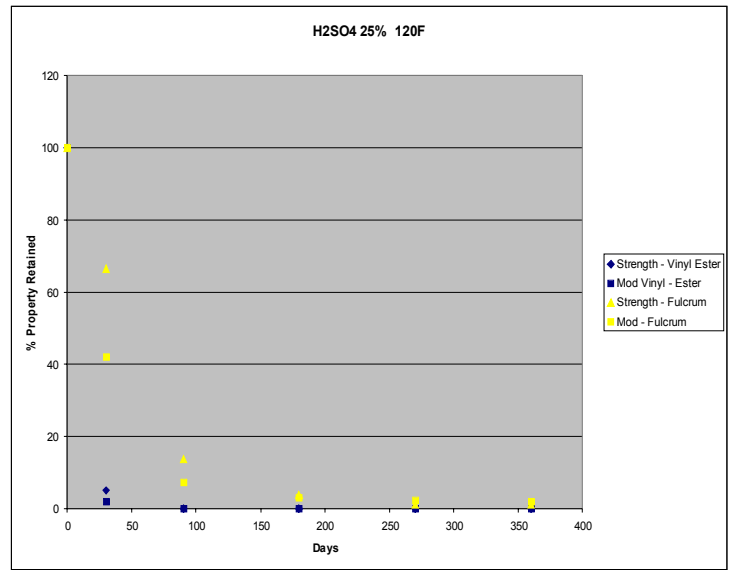
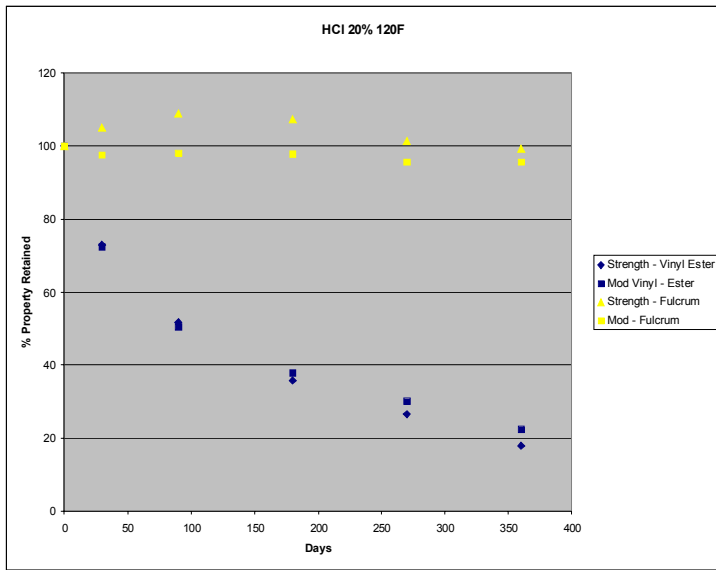
Tel: +1 989-636-1025  
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\* Fulcrum is a trademark of Fulcrum Composites, Inc.

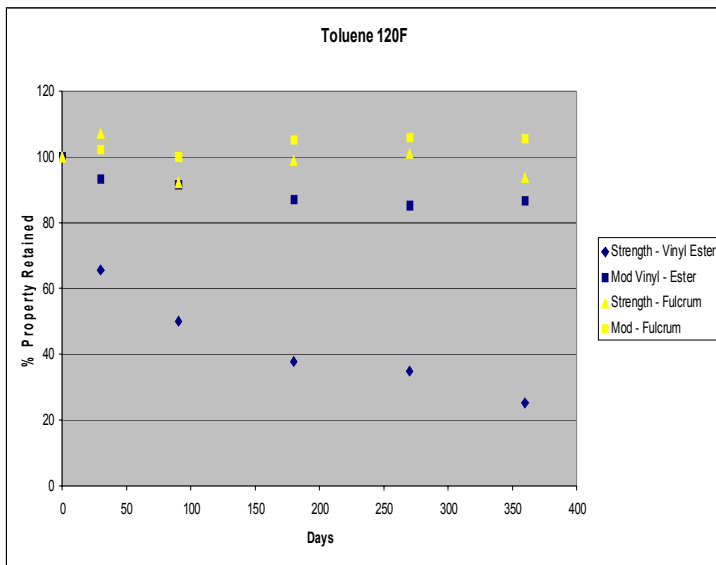
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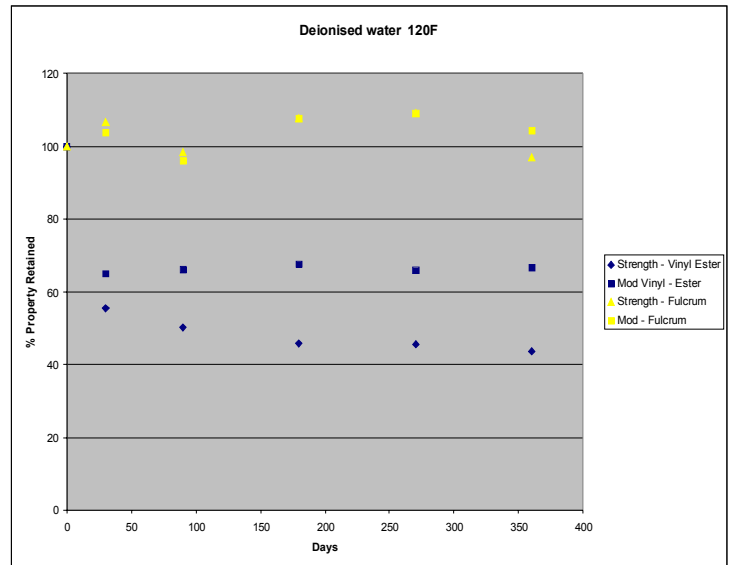
## Acids



## Organic Solvent



## Water



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