

CHEMICAL RESISTANCE GUIDE FOR STAIRCARE SC-**R** REINFORCED PULTRUDED PRODUCTS

Staircare SC-**R** is manufactured with high quality fibreglass reinforced resin. Our standard product lines use the superior isophthalic polyester resin. For special applications Staircare offers vinyl ester resin as an alternative. Chemical resistance guide for moulded products (grated stair tread) are available on request.

| Chemical | ISOPHTHALIC POLYESTER | | VINYL ESTER RESIN | |
|----------------------|-----------------------|--------------------------|-------------------|--------------------------|
| | %Concentration | Max. Opera. Temp. F/C | %Concentration | Max. Opera. Temp. F/C |
| Acetic Acid | 50 | 125/52 | 50 | 180/82 |
| Aluminium Hydroxide | 100 | 160/71 | 100 | 170/77 |
| Ammonium Chloride | ALL | 170/77 | ALL | 190/88 |
| Ammonium Hydroxide | 28 | N/R | 28 | 100/38 |
| Ammonium Bicarbonate | 15 | 125/52 | 50 | 150/65 |
| Ammonium Sulphate | ALL | 170/77 | ALL | 200/93 |
| Benzene | N/R | N/R | N/R | N/R |
| Benzoic Acid | SAT | 150/66 | SAT | 200/93 |
| Borax | SAT | 170/77 | SAT | 200/93 |
| Calcium Carbonate | SAT | 170/77 | ALL | 180/82 |
| Calcium Nitrate | ALL | 180/82 | ALL | 200/93 |
| Carbon Tetrachloride | N/R | N/R | 100 | 75/24 |
| Chlorine Dry Gas | ... | 140/60 | ... | 170/77 |
| Chlorine Water | SAT | 80/27 | SAT | 180/82 |
| Chromic Acid | 5 | 70/21 | 10 | 120/49 |
| Citric Acid | ALL | 170/77 | ALL | 200/93 |
| Copper Chloride | ALL | 170/77 | ALL | 200/93 |
| Copper Cyanide | ALL | 170/77 | ALL | 200/93 |
| Copper Nitrate | ALL | 170/77 | ALL | 200/93 |
| Ethanol | 50 | 75/24 | 50 | 90/32 |
| Ethylene Glycol | 100 | 90/32 | 100 | 200/93 |
| Ferric Chloride | ALL | 170/77 | ALL | 200/93 |
| Ferrous Chloride | ALL | 170/77 | ALL | 200/93 |
| Formaldehyde | 50 | 75/24 | ALL | 100/38 |
| Gasoline | 100 | 80/27 | 100 | 150/65 |
| Glucose | 100 | 170/77 | 100 | 200/93 |
| Glycerine | 100 | 150/66 | 100 | 200/93 |
| Hydro Bromic Acid | 50 | 120/49 | 50 | 120/49 |
| Hydrochloric Acid | 37 | 75/24 | 37 | 100/38 |
| Hydrogen Peroxide | 5 | 100/38 | 30 | 100/38 |
| Lactic Acid | ALL | 170/77 | ALL | 200/93 |
| Lithium Chloride | SAT | 150/66 | SAT | 200/93 |

| | | | | |
|----------------------|-----|--------|-----|--------|
| Magnesium Chloride | ALL | 170/77 | ALL | 200/93 |
| Magnesium Nitrate | ALL | 140/60 | ALL | 180/82 |
| Magnesium Sulphate | ALL | 170/77 | ALL | 190/88 |
| Mercuric Chloride | 100 | 150/66 | 100 | 190/88 |
| Mercurous Chloride | ALL | 140/60 | ALL | 190/88 |
| Nickel Chloride | ALL | 170/77 | ALL | 180/82 |
| Nickel Sulphate | ALL | 170/77 | ALL | 200/93 |
| Nitric Acid | 20 | 70/21 | 20 | 200/93 |
| Oxalic Acid | ALL | 75/24 | ALL | 100/38 |
| Perchloric Acid | N/R | N/r | 30 | 120/96 |
| Phosphoric Acid | 100 | 120/49 | 100 | 80/27 |
| Potassium chloride | All | 170/77 | All | 200/93 |
| Potassium Dichromate | ALL | 170/77 | ALL | 200/93 |
| Potassium Nitrate | ALL | 170/77 | ALL | 200/93 |
| Potassium Sulphate | ALL | 170/77 | ALL | 200/93 |
| Propylene Glycol | ALL | 170/77 | ALL | 200/93 |
| Sodium Acetate | ALL | 160/77 | ALL | 200/93 |
| Sodium Bisulphate | ALL | 170/77 | ALL | 200/93 |
| Sodium Bromide | ALL | 170/77 | ALL | 200/93 |
| Sodium Cyanide | ALL | 170/77 | ALL | 200/93 |
| Sodium Hydroxide | N/R | N/R | 25 | 150/66 |
| Sodium Nitrate | ALL | 170/77 | ALL | 200/93 |
| Sodium Sulphate | ALL | 170/77 | ALL | 200/93 |
| Stannic Chloride | ALL | 160/71 | ALL | 190/88 |
| Sulphuric Acid | 25 | 75/24 | 75 | 100/38 |
| Tartaric Acid | ALL | 170/77 | ALL | 200/93 |
| Vinegar | 100 | 170/77 | 100 | 200/93 |
| Water, Distilled | 100 | 170/77 | 100 | 180/82 |
| Zinc Nitrate | ALL | 170/77 | ALL | 200/93 |
| Zinc Sulphate | ALL | 170/77 | ALL | 200/93 |

ALL – concentrations; **SAT** – Saturated Solution; **N/R** – Not Recommended; ... No info. Available

Remarks: - the corrosion resistance data listed above is for general information only. Resin manufacturers have provided test data, which indicates that the specific resin can withstand the corrosion conditions listed above. Staircare Australia Pty Ltd believes the data to be true and accurate but no guarantee is expressed or implied as to specific performance. Testing for specific environments is recommended. Our responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the materials sold by Staircare Australia Pty Ltd.