

**Chemical Resistance** (24 hour spot test. Based on BSEN438-2:1991)

Acetone- Unaffected  
 Acetonitrile- Unaffected  
 Ammonium Hydroxide – 28%- Unaffected  
 Aqua regia- Unaffected  
 Benzyl alcohol- Unaffected  
 Chloroform- Unaffected  
 Chloroform – 100%- Unaffected  
 Chromic acid pickle (\*1) Unaffected  
 Dichloromethane- Surface attack  
 Dimethylformamide- Unaffected  
 Ethyl acetate- Unaffected  
 Formaldehyde – 37%- Unaffected  
 Hydrochloric acid – 30%- Unaffected  
 Hydrochloric acid – concentrated- Unaffected  
 Hydrofluoric acid – 40%- Slight bleaching  
 \*1 72g/l chromium trioxide + 360g/l sulfuric acid  
 \*2 Changes to concentrated solution, then partly carbonates

Hydrogen Peroxide- Unaffected  
 Methanol- Unaffected  
 Nitric acid – 70%- Very slight bleaching  
 Nitric acid – concentrated- Slight yellowing  
 Nitric acid – fuming- Attack and staining  
 Perchloric acid – 0.1N- Unaffected  
 Phosphoric acid – concentrated- Unaffected  
 Potassium hydroxide pellet (\*2)- Unaffected  
 Sodium hydroxide – 50%- Unaffected  
 Sodium hydroxide pellet (\*2)- Unaffected  
 Sodium hypochlorite- Unaffected  
 Sulphuric acid – 70%- Unaffected  
 Sulphuric acid – concentrated- Surface attack  
 Xylene- Unaffected

**Mechanical Properties**

Tensile strength 85 N/mm<sup>2</sup>  
 Tensile Modulus 10,500 N/mm<sup>2</sup>  
 Elongation at break 0.8%  
 Flexural strength 112 N/mm<sup>2</sup>  
 Flexural Modulus 10,000 N/mm<sup>2</sup>  
 Compressive strength 190 N/mm<sup>2</sup>

Coefficient of linear thermal expansion  $34 \times 10^{-6}$   
 Water absorption – 24 hours at 23°C  
 5–10 mg (0.06–0.068%) ISO 62 (1980)

**Thermal Properties**

Thermal Shock  
 2000 cycles (90 sec. at 75°C, 90 sec. dwell, 90 sec. at 15°C) No effect  
 Should not be used with dry-ice or liquid nitrogen

Smoke Emission  
 Low Smoke Emission – BS 6853 1999 App. D  
 Clause d.8.4  
 Result – Ao(on) 8.75, Ao(off) 10.41  
 Flammability Class 0  
 Thermal Decomposition 350°C  
 Glass transition temperature (T<sub>g</sub>) 120 – 130°C

**Radioactive Decontamination**

Decontamination factor (geometric mean) 5598.0  
 Deviation factor 1.25  
 Ease of radioactive decontamination classification “Excellent”