

TEST RESULTS



Characteristics	Results/Observations	PS 18 : 1966 Requirements
• Density (g/cm ³), average	1.80	–
• Impact Resistance	No visible cracks was observed	Shall not show cracks
• Barcol Hardness, average	52	40 minimum
• Oven test for Cracking or Crazing	No visible crack was observed	Should not show evidence of Cracking or crazing
• % Water Absorbed, average % Increased in Weight, average % Soluble Matter Loss, average	0.03 0.02 0.01	Shall not absorb water in excess of 0.58% in 24th
• Stain - Coffee - Tea - Washing Detergent - Acetone - Olive Oil - Lipstick - Fly Spray - Ink Washable - 6% Urea - Alcohol - 1% Iodine - Shoe Polish (spray form) - Vinegar - 10% Household Ammonia Solution - 10% Citric Acid Solution - Amyl Acetate - Carbon Tetrachloride - Trisodium Phosphate	No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect No effect	Shall be such that it will withstand all reagents
• Scrub Test	Slight brush marks were observed on the two tested solid surface panels	Shall withstand 40000 cycles in the scrub test. (Only slight brush marks are allowed).
• Cigarette Test	0.01	Shall not more than 0.38mm
• Izod Impact Strength (L/m), average	19.5	–
• Maximum Tensile Strength (Mpa), average Elongation at Break (%), average	32.6 0.4	– –
• Coefficient of Thermal Expansion, $\mu\text{m}/\text{m}^{\circ}\text{C}$ $\mu 1$ (50 to 80°C) $\mu 2$ (140 to 180°C)	72.9 115	

TEST RESULTS

Chemicals and reagents	Results and observations	
	Results	Customer Requirement
• Hydrofluoric Acid (Conc)	3.0	1.0
• Hydrofluoric Acid (50%)	3.0	0
• Hydrofluoric Acid (20%)	1.0	0
• Nitric acid (Conc)	2.0	1
• Nitric acid (20%)	2.0	0
• Sulphuric Acid (98%)	3.0	3
• Sulphuric Acid (20%)	2.0	0
• Perchloric Acid (80%)	2.0	0
• Perchloric Acid (12%)	1.0	0
• Phosphoric Acid (85%)	1.0	0
• Phosphoric Acid (17%)	1.0	0
• Sodium Hydroxide (sat. sq)	2.0	0.5
• Sodium Hydroxide (20%)	2.0	0.5
• Potassium Hydroxide (30%)	2.0	2.0
• Potassium Hydroxide (10%)	1.0	0.5
• Alcoholic Potassium Hydroxide (30%)	1.0	0
• Ammonia (0.89%)	0	0
• Acetone	0	0
• Chloroform	0.5	0.5
• Carbon Tetrachloride	0	0
• Toluene	0	0
• Iso-propyl-alcohol (IPA)	0	0
• Tetrahydrofuran	0.5	0
• Ethyl acetate	0	0
• Di-ethyl-ether	0	0
• Bleach (Household)	0.5	0
• Hydrogen peroxide (3%)	0	0
• Iodine (3.5%) aq	0	0
• Bromine (sat. aq)	0.5	0
• Potassium permanganate (Sat)	0.5	0
• Ferric chloride (25%)	1.0	0
• Silver Nitrate (5%)	0.5	0.5
• Lead acetate (sat. aq)	0.5	0
• Writing ink (comm)	0	0
• Gentian violet (1% aq)	0	0
• Motor oil	0	0
• Methyl alcohol	0	0
• Acetic acid	0	0

Remarks 0 denotes "No Effect"

0.5 denotes "Faint Mark"

1.0 denotes "Noticeable Mark"

2.0 denotes "Obvious Mark"

3.0 denotes "Severe Mark"