

## MECHANICAL PROPERTIES

<b>PROPERTIES</b>	<b>RESULT</b>	<b>TEST METHOD</b>
Specific Gravity	1.67	ASTM D792:1998
Tensile strength <b>MPa</b>	45.1	ASTM D638:2000
Tensile Modulus <b>MPa</b>	11526	ASTM D638:2000
Elongation at break %	0.6%	ASTM D638:2000
Compression Strength <b>MPa</b>	126.7	ASTM 1621:2000
Barcol Hardness	>20	ASTM 695:1996
Water absorption %	57	IAPMO PS18 –66
Increase in weight %	0.04	IAPMO PS18 –66
Soluble matter loss %	0.04	
Colour Fastness	none	ASTM D2565:99
Stain resistance	1.88	IAPMO PS18 –66
Impact resistance	Passed	IAPMO PS18 –66
Washability / Scrub Test	Passed	IAPMO PS18 –66
Thermal coefficient of expansion microm/m/°C	66	ASTM E831 : 2000 Tested between 35 <sup>0</sup> C to 55 <sup>0</sup> C
microm/m/°C	134	between 90 <sup>0</sup> C to 130 <sup>0</sup> C
Oven test for cracking or crazing	Passed	IAPMO PS18 –66
Cigarette Test	0.006mm	IAPMO PS18 –66
Fungi and Bacteria	No Attack	ASTM G21, G22
Fire Propagation	Index of performance I <sub>1</sub> = 0.0, I <sub>2</sub> = 2.0 I <sub>3</sub> = 3.9, Overall I = 5.9 Class 0	BS476 prt. 6 :1989
Surface spread of Flame	Class 1	BS476 prt. 7 : 1997

### STAIN RESISTANCE PROPERTIES

STAINING AGENT	RESULT	TEST METHOD
Coffee	Passed	IAMPO PS18 –66
Tea	Passed	IAMPO PS18 –66
Detergent	Passed	IAMPO PS18 –66
Acetone	Passed	IAMPO PS18 –66
Olive oil	Passed	IAMPO PS18 –66
Lipstick	Passed	IAMPO PS18 –66
Fly spray	Passed	IAMPO PS18 –66
Ink, washable	Passed	IAMPO PS18 –66
Urea (6%)	Passed	IAMPO PS18 –66
Alcohol	Passed	IAMPO PS18 –66
Iodine (1%)	Passed	IAMPO PS18 –66
Shoe polish	Passed	IAMPO PS18 –66
Vinegar	Passed	IAMPO PS18 –66
House Ammonia solution (10%)	Passed	IAMPO PS18 –66
Citric acid solution (10%)	Passed	IAMPO PS18 –66
Acryl acetate	Passed	IAMPO PS18 –66
Carbon tetrachloride	Passed	IAMPO PS18 –66
Tri sodium phosphate	Passed	IAMPO PS18 –66

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Any stain noticed during the test sample was removable by scotch-brite.

### CHEMICAL RESIATANCE DATA

CHEMICAL	RESULT
<i>conc. Hydrofluoric Acid 50%</i>	Faint mark
<i>Hydrochloric Acid 37%</i>	Faint mark
<i>Hydrochloric Acid 20%</i>	No effect
<i>Nitric Acid 70%</i>	No effect
<i>Nitric Acid 23%</i>	No effect
<i>Sulphuric Acid 98%</i>	No effect
<i>Sulphuric Acid 20%</i>	No effect
<i>Perchloric Acid 70%</i>	No effect
<i>Perchloric Acid 20%</i>	No effect
<i>Phosphoric Acid 17%</i>	No effect
<i>Phosphoric Acid 85%</i>	Faint white mark
<i>Phenol in Acetic Acid 5%</i>	No effect
<i>Resorcinol</i>	No effect
<i>Sodium Hydroxide Saturated</i>	No effect
<i>Sodium Hydroxide 20%</i>	No effect
<i>Potassium Hydroxide 30%</i>	No effect
<i>Potassium Hydroxide 10%</i>	No effect

<i>ALC. Potash Hydroxide 30%</i>	No effect
<i>ALC. Potash Hydroxide 10%</i>	No effect
<i>Ammonia 0.9%</i>	No effect
<i>Di – Methyl Aniline</i>	No effect
<i>Di – Methyl Ethanol Amine</i>	No effect
<i>Acetone</i>	No effect
<i>Di Chloro Methane</i>	No effect
<i>Chloroform</i>	No effect
<i>Carbon Tetra Chloride</i>	No effect
<i>Toluene</i>	No effect
<i>Isopropyl Alcohol</i>	No effect
<i>Tetra hydro Furan</i>	No effect
<i>Ethyl Acetate</i>	No effect
<i>Di Ethyl Ether</i>	No effect
<i>Styrene</i>	No effect
<i>Methyl Ethyl Ketone</i>	No effect
<i>Bleach Ca(o)Cl 5%</i>	No effect
<i>Hydrogen Peroxide 3%</i>	No effect
<i>Methyl Ethyl Ketone Peroxide 60% DMP</i>	No effect
<i>Iodine 3.5%</i>	No effect
<i>Bromine Saturated</i>	No effect
<i>Potassium Permanganate Saturated</i>	No effect
<i>Sodium Di Chromate 20%</i>	No effect
<i>Ferric Chloride Saturated</i>	No effect
<i>Silver Nitrate 5%</i>	No effect
<i>Lead Acetate Saturated</i>	No effect
<i>Stannous Chloride 20%</i>	No effect
<i>Writing Ink Water based</i>	No effect
<i>Gentian Violet 15</i>	No effect
<i>Rhodamine 1%</i>	No effect
<i>Motor Oil</i>	No effect
<i>Methanol</i>	No effect

Test procedure: Spotted with assorted chemicals for 24 hrs. then washed clean **with water, Detergent and abrasive pad.**

### VOC EMISSION DATA

<b>PROPERTIES</b>	<b>RESULT</b>	<b>TEST METHOD</b>
TVOC emission	0.01 mg/m <sup>3</sup> per hr	<b><u>ASTM D5116-06</u></b>
Formaldehyde emission	<0.02 mg/m <sup>3</sup> per hr	<b><u>ASTM D5116-06</u></b>
Phenylcyclohexene emission	Not detected	<b><u>ASTM D5116-06</u></b>
Pthalate emission	<0.003 mg/m <sup>3</sup>	<b><u>ASTM D5116-06</u></b>
Total particles emission	<0.01 mg/m <sup>3</sup>	<b><u>ASTM D5116-06</u></b>