

# Chemical Resistance Testing on PaperStone (24 hr test)

August - 2009

Chemical	No effect	Excellent	Good	Fair	Failure
<b>Acids</b>					
Hydrochloric Acid 10%		X			
Hydrochloric Acid 37%		X			
Sulphuric Acid 98 %		X			
Sulphuric Acid 33 %		X			
Nitric Acid 65%		X			
Nitric Acid 30%		X			
Phosphoric Acid 85%	X				
Acetic Acid 99%	X				
Hydrofluoric Acid 48%		X			
Chromic Acid 60%	X				
<b>Bases</b>					
Ammonium Hydroxide 28%	X				
Sodium Hydroxide 46%		X			
<b>Salt</b>					
Silver Nitrate 1%		X			
Potassium Permanganate 10%			X		
Ferric (III) Chloride 10%	X				
Copper Sulphate 10%	X				
Sodium Hypochlorite 13%		X			
Sodium Chloride 10%	X				
<b>Organic Chemicals</b>					
Formaldehyde 37%	X				
Furfural	X				
Formic Acid 90%	X				
Acetic Acid 99%	X				
Phenol 88%	X				
<b>Solvents</b>					
Acetone	X				
Ethylalcohol	X				
Ethylene Glycol	X				
Ethylene Glycol Mono Butyl Ether	X				
Methylethylketone	X				
Dichloromethane	X				
Ethylacetate	X				
Acetic Anhydride	X				
n-Butyl Acetate		X			
n-Hexane	X				
Methylalcohol	X				
Methylisobutylketone	X				
Tetrahydrofurane	X				
Toluene		X			
Trichloroethylene		X			
Xylene	X				
<b>Biological Stains</b>					
Acridine Orange 1%	X				
Basic Fuchsin 1%			X		
Carbol Fuchsin 1%			X		
Malicite Green Oxalate 1%	X				
Methylene Blue 1%		X			
Methyl Violet 2B 1%			X		
Wright Stain 1%	X				
Gentian Violet (dye) 1%	X				
Most Household cleaners	X				

Paneltech Quality Assurance Lab - Aug. 2009

## Test procedure

The test was conducted by applying 5 drops of each reagent on the surface, covered with a watch glass (except those marked\*\*). Chemicals marked \*\* were tested with a saturated cotton ball covered by a bottle. All chemicals were tested at room temperature for a period of 24 hours, rinsed off with water and evaluated.

## Test results

**No effect:** No detectable stain, loss of gloss or change in work surface material.

**Excellent:** Slight stain or loss of gloss, but no change to the function, smoothness or life of the work surface material.

**Good:** A clearly discernible stain or loss of gloss, but no change to the function, smoothness or life of the work surface material.

**Fair:** Unacceptable staining or discernible deterioration or etching of the work surface material.

**Failure:** Severe stain or moderate deterioration, pitting cratering or etching of work surface material.