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Chemical Resistant High Pressure Laminates

General Information

Polytec's range of Chemical Resistant Laminates and Benchtops are designed for laboratory or specialised applications such as worktops, counters, splashbacks, furniture where a durable decorative work surface is required

Features

- Tough and durable
- Resistant to cracking, chipping, chemicals and reagents
- Industry relevant colour range
- Postformable to 10/10 & 90/10 on 33, 40 & 50mm E0 LDF Substrates

Environmental/Safety

Polytec is committed to ensuring that its products can be manufactured, transported, stored, used, disposed and recycled with an appropriate regard for safety, health and environmental protection. We support the safe handling of our products.

Physical Properties	**Typical Property**	**Test Method**
Density (Kg/K^3)	1350 - 1450	DIN 53479
Panel Tolerance (mm)		
Length	+/- 5	DIN 16926
Width	+/- 5	
Thickness	+/- 0.1	
Colour Stability	Blue wool standard Min 6	AS/NZS 2924.1
Thickness Swell (24hr @ 20°C)	3.5%	EN 317
Tensile Strength (N/mm^2)	>80	DIN 53457
Flexural Strength (N/mm^2)	>90	DIN 53457
Resistance to Impact (N)	>20	AS/NZS 2924.1
Resistance to Scratch	e 2	AS/NZS 2924.1
Resistance to Wear	e 350	AS/NZS 2924.1
Resistance to Steam	e 4	AS/NZS 2924.1
Dry Heat Resistance, 180°C		AS/NZS 2924.1
Finishes	e 4	
Resistance to Staining		AS/NZS 2924.1
Group 1 + 2	e 5	
Group 3 + 4	e 4	
Resistance to Boiling Water	No Visible Change	AS/NZS 2924.1

Fire Hazard Indices		AS/NZS 1530.3
Ignitability Index	10–14	
Spread of Flame Index	0-8	
Heat Evolved Index	2-6	
Smoke Developed Index	2-4	

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Chemical Resistance Test Results

Tested under the guidelines of EN 438-2:2005, the chemicals and reagents listed below were placed in contact with Polytec Chemical Resistant Laminate surface under a 25mm diameter watch glass cover for a duration of 16 hours prior to evaluation on the effect.

The results were noted as follows;

- No effect
- Chemicals/Reagents marked with an asterisk (*)caused a slight change in gloss or colour
- Chemicals/Reagents marked with a double asterisk (**) may cause slight damage, depending upon the duration of exposure

Polytec always recommend prompt clean-up of all spills on its decorative surfaces and the surface maintained in accordance with our Care and Maintenance Instructions.

Acids

Acetic Acid (all concentrations)	Nitric Acid (all concentrations) **
Aqua Regia: Sulphuric Acid 77% : 65% Nitric Acid	Perchloric Acid (concentrated)
Chromic Trioxide (Chromic Acid Cleaning Solution)*	Phosphoric Acid (all concentrations)
Formic Acid (all concentrations)	Picric Acid 1.2% (sat.)
Glacial Acetic Acid 99% (concentrated)	Sulphuric Acid (all concentrations)**
Hydrochloric Acid (all concentrations)	Tannic Acid (sat.)
Hydrofluoric Acid 48% (concentrated) *	Uric Acid (sat.)

Solvents

Acetone	Ethyl Alcohol
Amyl Acetate	Formaldehyde
Amyl Alcohol	Methanol
Butyl Alcohol	Methyl Ethyl Ketone
Carbon Disulphide	Methylene Chloride
Carbon Tetrachloride	Naphthalene
Chlorobenzene	n-Hexane
Chloroform	Phenol (all concentrations)*
Cresol	Tetrahydrofuran
Dimethylformamide	Toluene
Dioxane	Trichloroethane
EDTA	Xylene
Ethyl Acetate	

Bases

Ammonium Hydroxide (all concentrations)	Sodium Sulphide 15%
Sodium Hydroxide (all concentrations)**	

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General Reagents

Alconox (Lab. Detergent)
Aluminon
Ammonium Phosphate
Aromatic Ammonia
Benedicts Solution
Calcium Hypochlorite (concentrated)
Cellosolve
Camphorated para-chlorophenol*
Copper Sulphate
Ethylene Glycol
Eucalyptol
Formalin
Hydrogen Peroxide 3%
Iodine
Karl Fischer Reagent
Kerosene
Lactated Ringers
Lysol
Methyl Methacrylate
Mineral Oil
Monsel's Solution (Ferric Subsulphate)
Naphtha
Petrol
Petroleum Jelly
Phosphate Buffered Saline (PBS)
Pine Oil
Potassium Permanganate
Povidone Iodine
Procaine
Quaternary Ammonia Compounds
Silver Nitrate
Sodium Azide
Sodium Chromate
Sodium Hypochlorite 5%
Sodium Thiocyanate
Sucrose 50%
Thymol & Alcohol
Tincture of Iodine
Tincture of Mercurochrome
Tincture of Merthiolate
Trisodium Phosphate 30%
Urea
Vegetable Oil
Water
Zephiran Chloride
Zinc /chloride
Zinc Oxide Ointment

Stains and Indicators

Ag Eosin Bluish 5% in Alcohol
Bromothymol Blue
Cresol Red
Crystal Violet
Gentian Violet 1%
Gram Stain
Malachite Green
Methyl Orange
Methyl Red
Methylene Blue
Nigrosine
Phenolphthalein
Safranin O
Sudan III
Thymol Blue
Wright's Blood Stain