

Technical Specifications - HYCHEM Epoxy Resin Products

No.	Properties	Test Method	S.I
1	Compressive Strength	ASTM D695	220 MPa
2	Flexural Strength	ASTM D790	110 MPa
3	Heat Distortion Temp.	ASTM D648	165 C
4	Rockwell M Hardness	ASTM D785	105
5	Fire Resistance	ASTM D635	Self Extinguishing
6	Water Absorption	ASTM D570	0.02%
7	Density	ASTM D792	1.96g/cc

HYCHEM worktops are monolithic, offering consistent chemical resistance through the entire mass of the material.

They are moulded from modified epoxy resin, compounded and heat cured.

HYCHEM Epoxy offers excellent acid, alkali and solvent resistance as well as outstanding performance against physical abuse.

The satin, (low sheen), finish makes HYCHEM an ideal work surface both aesthetically and functionally. HYCHEM worktops are suitable for most situations found in the modern laboratory and other commercial and domestic areas.

SPECIFICATION FOR EPOXY RESIN WORKTOPS

All worktops manufactured and supplied by HYCHEM are 15m, 19mm & 25mm thick epoxy resin.

Epoxy resin sheets are moulded from a modified epoxy resin that has been especially compounded and cured to provide the optimum physical and chemical resistance required of a heavy duty laboratory working surface and have been tested to have the following typical values.

Chemical Resistance Test (24 hours Spot Test)

No	Chemical	No Effect	Slight Spot	Spot
1	Acetic Acid, 5%	✓		
2	Acetic Acid Glacial	✓		
3	Acetone	✓		
4	Ammonium Hydroxide,10%	✓		
5	Carbon Tetrachloride	✓		
6	Chromic Acid, 40%	✓		
7	Diethyl Ether	✓		
8	Ethyl Acetate	✓		
9	Ethyl Alcohol	✓		
10	Heptane	✓		
11	Hydrochloric Acid, 10%	✓		
12	Hydrochloric Acid, 37%	✓		
13	Kerosene	✓		
14	Methyl Alcohol	✓		
15	Mineral Oil	✓		
16	Nitric Acid 40%	✓		
17	Nitric Acid 70%	✓		
18	Oleic Acid	✓		
19	Olive Oil	✓		
20	Soap Solution, 1%	✓		
21	Sodium Carbonate, 20%	✓		
22	Sodium Hydroxide, 60%	✓		
23	Sodium Hypochlorite, 4%	✓		
24	Sulphuric Acid, 60%	✓		
25	Sulphuric Acid, 96%			✓
26	Toluene	✓		
27	Transformer Oil	✓		
28	Turpentine	✓		

Heat and Flame Resistance Testing

Test Report A - Resistance to Heat

Test A - Porcelain Crucible. A porcelain crucible was heated to a dull red colour, placed on the test material and allowed to cool to ambient temperature.

Observation - No surface deformation or irregularities were observed.

Test Report B - Resistance to Flame

Test B - Bunsen burner. A 3/8" Bunsen burner was adjusted to a quiet flame with a 1 1/2" inner blue cone and overturned on the test material, exposing material to the flame for 5 minutes.

Observation - charring and deformation was observed.

