



Epoxy Resin

Part 1 – Specifications for Modified Epoxy Resin

Tops and curbs shall be molded from a modified epoxy resin that has been especially compounded and cured to provide optimum physical and chemical resistance required for a heavy duty laboratory working surface. Impregnated stone and/or furane resins are not equal. Tops and curbs shall be a uniform mixture throughout, and shall not depend on a surface coating that can be readily removed by chemical or physical abuse.

Tops and curbs shall be non-glaring matte finish and black in color.

Tops shall be a thickness as required with a drip groove provided on underside of all sink top exposed edges. All edges shall have a slight radius.

Curbs shall be bonded to the surface on the top to form a square water-tight joint. All joints in tops to be bonded with an approved epoxy cement and shall be smooth and water-tight.

Counters with integral curbs shall have a junction with a $\frac{3}{4}$ " radius, except around columns and special cutouts, which will have a standard bonded curb.

Part 2 – Chemical Resistance

Epoxy Resin is highly resistant to the normally used laboratory alkalis, alcohol, acids and solvents. The following solutions listed were tested for a period of 24 hours with optimum resistance.

Acetic Acid Glacial	Chloroform	Methyl Alcohol
Acetone	Chromic Acid	Nitric Acid
Ammonium Hydroxide	Ethyl Alcohol	Phenol
Amyl Acetate	Ethyl Ether	Phosphoric Acid
Aqua Regia	Formaldehyde	Silver Nitrate
Benzene	Hydrochloric Acid	Sodium Hydroxide
Butyl Alcohol	Hydrofluoric Acid	Sulphuric Acid
Calcium Hypochlorite	Hydrogen Peroxide	Xylene
Carbon Disulfide	Kerosene	Zinc Chloride

Part 3 – Physical Properties

Flexural Strength	ASTM-Method D-790	16000/psi
Compressive Strength	ASTM-Method D-695	36,500/psi
Hardness Rockwell M	ASTM-Method D-785	110
Density Gr./CC.	ASTM-Method D-792	123.55 lbs/ft ³
Water Absorption	ASTM-Method D-570	0.0076%
Flame Test	ASTM-Method D-635	Self-extinguishing



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Part 4 – Fire Resistance

A Bunsen burner overturned on working surface for several minutes causes no adverse effects. Epoxy resin is self-extinguishing, in accordance with ASTM-Method D-635. Independent laboratory test reports available upon request.