

TEC-RESIN EPOXY WORK SURFACES

Epoxy Resin products are generally specified in section 11600, 11A, 12A or 12345 of most equipment specifications.

ARCHITECTURAL SPECIFICATION

EPOXY RESIN WORKSURFACES AND SHELVES shall be 1" (25mm) thick. Worksurfaces and shelves shall be monolithic and molded from a modified epoxy resin. Worksurfaces and shelves shall have a smooth, non-glare finish. Worksurfaces and shelves shall be installed with an uniform 1" (25mm) overhang on the front and exposed ends. Worksurfaces and shelves shall have a continuous drip groove 1/8" (3mm) wide 1/8" (3mm) deep on the underside of all exposed edges. All exposed edges shall be finished with a 1/8" (3mm) bevel.

BACKGUARDS shall be of the same material, thickness and finish as the work surface. Backguards are to be supplied loose for field application to assure a proper fit at walls.

SINKS shall be as indicated on drawings or manufacturers closest stock size. All rectangular sinks shall be furnished complete with an 1-1/2" (38mm) SO-3R outlet and an OE-R overflow. Sinks shall be molded in one piece with the corners coved and bottoms sloped to outlet and shipped loose for field installation.

TECHNICAL DATA

EPOXY PRODUCTS

Typical physical properties and chemical resistance characteristics of resin epoxy.

1.	Physical Properties	IMPERIAL	S.I.
a.)	Compressive Strength (ASTM D695)	36500psi	2566MPa
b.)	Flexural Strength (ASTM D790)	1600psi	1125MPa
c.)	Tensile Strength (ASTM D638)	10500psi	738MPa
d.)	Density (ASTM D792)		196Kg/m ³
e.)	Rockwell M Hardness (ASTM D785)	110	
f.)	Heat Distortion (Temp. at 264 PSI) (ASTM D648)	350° F	176° C
g.)	Thermal Coefficient of Expansion (ASTM D696)	1.1509 x 10-5 inches/° F	(2.0819 x 10-5 mm/ C
h.)	Fire Resistance (ASTM D635)		(Self Extinguishing)
i.)	Water Absorption (ASTM D570)		0.0076%

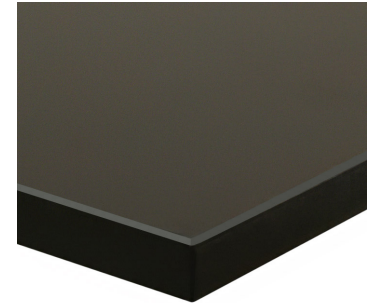
2. Chemical Spot Test

Non-Volatile Reagents- Approximately 1/2cc of a reagent was applied to the surface tested. The reagent was covered with a wide mouth bottle to retard evaporation.

Volatile Reagents- A one(1) inch ball of cotton was saturated with reagent and placed on the surface tested, then covered with a wide mouth bottle.

All surface test spots were wet with reagent for a 16 hour period. After exposure, the surface was washed with soap and water, rinsed and dried before examination and evaluation.

The test surface was also subjected to a trickling of boiling water for 5 minutes from condensation of steam blown against the surface, inclined at a 45 degree angle. The result was no effect.



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Chemical Spot Test Results		NO EFFECT	SLIGHT SPOT	SPOT
1.	Acetic Acid, Glacial	x		
2.	Acetone	x		
3.	Ammonium Hydroxide, 28%	x		
4.	Aniline Oil	x		
5.	Benzene	x		
6.	Carbon Tetrachloride	x		
7.	Chromic Acid, 40%		x	
8.	Citric Acid, 10%	x		
9.	Cottonseed Oil	x		
10.	Dichromate Cleaning Solution			x
11.	Diethyl Ether	x		
12.	Dimethyl Formamide	x		
13.	Distilled Water	x		
14.	Detergent Solution ¼%	x		
15.	Ethyl Acetate	x		
16.	Ethyl Alcohol, 95%	x		
17.	Ethyl Alcohol, 50%	x		
18.	Ethylene Dichloride (Dichloroethane)	x		
19.	Heptane	x		
20.	Hydrochloric Acid, 37%		x	
21.	Hydrochloric Acid, 28%	x		
22.	Hydrogene Peroxide, 28%	x		
23.	Hydrogene Peroxide, 3%	x		

Chemical Spot Test Results		NO EFFECT	SLIGHT SPOT	SPOT
24.	Iso-Octane	x		
25.	Kerosene	x		
27.	Nitric Acid, 70%	x		
28.	Nitric Acid, 70%	x		
29.	Nitric Acid, 10%	x		
30.	Oleic Acid	x		
31.	Olive Oil	x		
32.	Phenol	x		
33.	Soap Solution, 1%			
34.	Sodium Carbonate, 20%	x		
35.	Sodium Carbonate, 2%	x		
36.	Sodium Chloride, 10%	x		
37.	Sodium Hydroxide, 50%		x	
38.	Sodium Hydroxide, 10%		x	
39.	Sodium Hydrochlorite, 5%	x		
40.	Sulfuric Acid. 96%	x		
41.	Sulfuric Acid. 60%	x		
42.	Sulfuric Acid. 33%	x		
43.	Toluene	x		
44.	Transformer Oil	x		
45.	Turpentine	x		
46.	Acetic Acid, 5%	x		
A.)	100 Hours Soaked Cellulose Sponge Test.	x		
B.)	Boiling Water Trickling, 5 Minutes	x		

HEAT RESISTANCE

A.) A high form porcelain crucible, size 15ml. capacity, was heated over a Bunsen burner until the crucible bottom attained a dull, red heat. Immediately the hot crucible was transferred to the top surface and allowed to cool to room temperature. Upon removal of the cooled crucible, there were no blisters, cracks nor any breakdown of the top surface whatsoever.

B.) The top surface showed no blistering or cracking when an overturned ¾" (9.525mm) Bunsen burner, adjusted to quiet flame with a 1-½" (38mm) inner cone, was allowed to remain on the surface for a period of five (5) minutes.

SEVEN DAY IMMERSION TEST AVAILABLE UPON REQUEST