AdvanceLab

EPOXY RESIN

WORKTOP

bizSAFE STAR

ACS REGISTRARS Health & Safety ISO 45001

ACS REGISTRARS Quality Assurance ISO 9001

CONTENTS

The high level of performance in chemical, moisture, heat, and abrasion resistance make epoxy resin countertops the benchmark by which all others are judged.

Our products withstand laboratory chemicals, reagents, organic solvents, cleaning solutions, and dilutions of acids and bases. The superior quality of epoxn products includes the ability to endure many extreme, harsh and volatile chemicals while maintaining resiliency.

Epoxy resin countertops have superb heat, fire, and flame resistance including the classification of self-extinguishing. A high heat distortion temperature and a low thermal coefficient of thermal expansion will readily withstand normal laboratory temperatures.

An inherent resistance to moisture due to a non-porous surface means no absorption or penetration into the solid monolith. Our product characteristics of structural stiffness, hardness and durability surpass laboratory standards.

Epoxy resin countertops meet or exceed the requirements of most wet, research, analytical, biological, chemical, physical, and quality assurance laboratories.

Expoy work surfaces are available in a style, size and configuration that will perfectly match your architectural design.

Our work surfaces are molded with three thickness options:
$^{3}/_{5}$" (15mm)
$^{3}/_{4}$" (19mm)
1" (25mm).

Epoxy resin countertops provide outstanding performance in chemical, heat, abrasion, and moisture resistance.

Epoxy Resin Worktop

Technical Data

Physical Properties

Number	Properties	Test Method (ASTM)	S.I
1	Compressive Strength	D695 -10	136.5 MPa
2	Flexural Strength	D790 -10	55.1 MPa
3	Rockwell Hardness (M Scale)	D785 -08	90
4	Water Absorption	D570 -98	0.022%
5	Heat Distortion Temperature	D648 -07	115˚C
6	Density	D792 -00	1.95 g/cm^3
7	Flexural Modulus	D790 -10	16205 MPa
8	Fire Resistance	D635 -06	No Flaming

Chemical / Satin Resistance Properties Evaluation

After 24-hours exposure, exposed areas were washed with water, then a detergent solution and finally with isopropyl alcohol. Materials were then rinsed with distilled water and dried with a cloth. Samples are numerically rated as follows:

0 = No effect: No detectable change in the material surface

1 = Excellent: Slight detectable change in colour or gloss but no change to the function or life of the surface

2 = Good: Clearly discernible chnage in colour or gloss but no significant impairment of surface life or fuction

3 = Fair: Objectionable change in appearance due to discolouration or etch, possibly resulting in deterioration of fuction over an extended period of time

Method A

Volatile Chemicals:
A cotton ball, saturated with the test chemical, was placed in a one-ounce bottle (10mm x 7mm test tube or similar container). The container was invertrd on the test material surface for a period of 24 hours. Temperature of test: 23˚C plus or minus 2˚C (73˚F plus or minus 4˚F). This nethod was used for the organic solvents.

Method B

Non-Volatile Chemicals:
Five drops (1/4cc) of the test chemical are placed on the test material surface. The chemical was covered with a watch glass (25mm) for a period of 24 hours. Temperature of test: 23˚C plus or minus 2˚C (73˚F plus or minus 4˚F). This method was used for all chemicals listed other than solvents.

Number	Chemicals	Test Method	Test Result
1	Acetate, Amyl	A	0
2	Acetate, Ethyl	A	0
3	Acetic Acid, 98%	B	0
4	Acetone	A	0
5	Acid Dichromate, 5%	B	1
6	Alcohol, Butyl	A	0
7	Alcohol, Ethyl	A	0
8	Alcohol, Methyl	A	0
9	Ammonium Hydroxide, 28%	B	0
10	Carbon Tetrachloride	A	0
11	Chloroform	A	0
12	Chromic Acid, 60%	B	1
13	Cresol	A	0
14	Dichloroacetic Acid	A	0
15	Dimethylformamide	A	0
16	Dioxane	A	0
17	Ethyl Ether	A	0
18	Formaldehyde, 37%	A	0
19	Formic Acid, 90%	B	0
20	Furfural	A	0
21	Gasoline	A	0
22	Hydrochloric Acid, 37%	B	0
23	Hydrofluoric Acid, 48%	B	3
24	Hydrogen Peroxide, 30%	B	0
25	Iodine, Tincture of	B	0
26	Methyl Ethyl Ketone	A	0
27	Methylene Chloride	A	0
28	Naphthalene	A	0
29	Nitric Acid, 20%	B	0
30	Nitric Acid, 30%	B	0
31	Nitric Acid, 70%	B	1
32	Phenol, 90%	A	0
33	Phosphoric Acid, 85%	B	0
34	Silver Nitrate, Saturated	B	0
35	Sodium Hydroxide, 10%	B	0
36	Sodium Hydroxide, 20%	B	0
37	Sodium Hydroxide, 40%	B	0
38	Sodium Hydroxide, Flake	B	0
39	Sodium Sulfide, Saturated	B	0
40	Sulfuric Acid, 33%	B	0
41	Sulfuric Acid, 77%	B	0
42	Sulfuric Acid, 96%	B	3
43	Sulfuric Acid 77% & Nitric Acid 70%, Equal parts	B	1

**testing was performed in accordance to the Scientific Equipment and Furniture Association (SEFA) "SEFA 3-2010 Laboratory Work Surfaces" publication.*

PSB Singapore

RESULTS

No	Group	%	Method	Rating
	Acid			
1	Acetic Acid	98	B	0
2	Dichromate Acid	5	B	1
3	Chromic Acid	60	B	1
4	Formic Acid	90	B	0
5	Hydrochloric Acid	37	B	0
6	Hydrofluoric Acid	48	B	3
7	Nitric Acid	20	B	0
8	Nitric Acid	30	B	0
9	Nitric Acid	70	B	1
10	Phosphoric Acid	85	B	0
11	Sulphuric Acid	33	B	0
12	Sulphuric Acid	77	B	0
13	Sulphuric Acid	96	B	3
14	Sulphuric Acid 77% :Nitric Acid 70%	1:1	B	1
	Bases			
15	Ammonia Hydroxide	28	B	0
16	Sodium Hydroxide	10	B	0
17	Sodium Hydroxide	20	B	0
18	Sodium Hydroxide	40	B	0
19	Sodium Hydroxide flake	-	B	0
	Halogens			
20	Tincture of Iodine	-	B	0
	Salts			
21	Sodium Sulfide	saturated	B	0
22	Silver Nitrate	saturated	B	0
23	Zinc Chloride	saturated	B	0
	Organic Chemicals			
24	Amyl Acetate	-	A	0
25	Cresol	-	A	0
26	Dimethylformamide	-	A	0
27	Formaldehyde	37	A	0
28	Furfural	-	A	0
29	Gasoline	-	A	0
30	Hydrogen Peroxide	30	B	0
31	Methyl Ethyl Ketone	-	A	0
32	Phenol	90	A	0
33	Xylene	-	A	0
34	Acetone	-	A	0

RESULTS (cont'd)

No	Group	%	Method	Rating
	Solvents			
35	Butyl Alcohol	-	A	0
36	Carban Tetrachloride	-	A	0
37	Chloroform	-	A	0
38	Dichloro Acetic Acid	-	A	0
39	Diethyl Ether	-	A	0
40	Dioxane	-	A	0
41	Ethyl Alcohol	-	A	0
42	Ethyl Acetate	-	A	0
43	Methyl Alcohol	-	A	0
44	Methylene Chloride	-	A	0
45	Naphthalene	-	A	0
46	Toluene	-	A	0
47	Trichloroethylene	-	A	0

LEOW SIONG MING
TECHNICAL EXECUTIVE

for DR LI SIHAI
AVP / SENIOR CHEMIST
COATINGS & INDUSTRIAL CHEMICALS
CHEMICAL & MATERIALS

Colour Guide

Black

Grey

Standard Sizes:

1) 2520 x 1520mm
2) 3020 x 1520mm

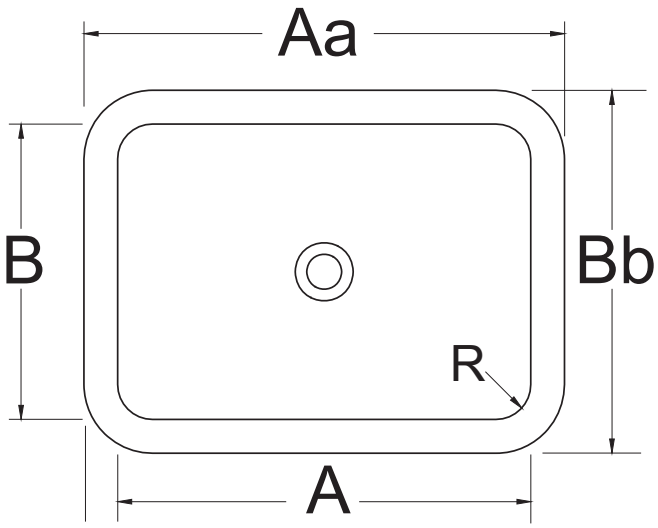
Sink

Epoxy Sinks

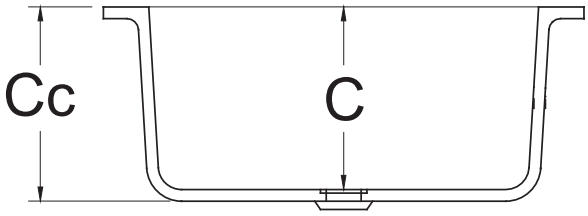
Epoxy sink combines both aeshetic and fuctional feature with its stylish design and lightweight without foregoing the durability and resistance of conventional epoxy sinks. The sinks can be configured to fit under the worktops (under-mount) or drop-in solution. Epoxy sinks are tested and certified to be low VOC-emitting materials under the MAS Certified Green® program.

Colours:

- Black
- Grey



Top View



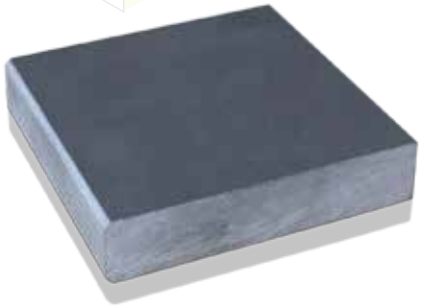
Side View

Model	Internal Length A	Internal Width B	Internal Depth C	External Length Aa	External Width Bb	External Depth Cc	Weight (kg)
ADS 3	305mm	203mm	152mm	348mm	251mm	162mm	3.0
ADS 5	356mm	254mm	152mm	399mm	297mm	162mm	5.0
ADS 6	406mm	305mm	203mm	449mm	348mm	213mm	6.0
ADS 33	457mm	381mm	279mm	500mm	424mm	289mm	11.0
ADS 40	406mm	406mm	190mm	449mm	449mm	200mm	7.0

- All dimension in millimeters (mm)
- All sinks assumes a centre outlet position

EPOXY RESIN

AdvanceLab has built a rock steady reputation for solutions where most fail. Since our establishment in 2003, we have positioned ourselves as the premier facility solution provider for the scientific industry; designing, building and delivering quickly and without fuss. We have also taken our brand of expertise globally; now with exports of laboratory casework, fume hoods, laminar flow cabinets and clean booths heading to 30 countries, covering all continents.



Indonesia
PT. Advancelab Saintifik

253 Kaki Bukit Ave 1,
Singapore 416061
Tel: +65 6448 8255
Fax: +65 6448 9833
Email: info@advancelab.com.sg

Malaysia
Advancelab Sdn Bhd

No. 3388, Jalan Pekeliling Tanjung
27/2, Kawasan Perindustrian Indahpura,
81000 Kulaijaya, Johor, Malaysia.
Tel: +607 660 8877
Fax: +607 660 8866
Email: info-my@advancelab-global.com

Myanmar
Advancelab Scientific &
Engineering Co., Ltd

No.(81/1)-1A, Myin Thar 7th Street,
(14/1)Ward, South Okkalapa Township,
Yangon, Myanmar
Tel: +95 (9) 779753802
Email: info-mm@advancelab-global.com

Singapore
Advancelab (S) Pte Ltd

253 Kaki Bukit Ave 1,
Singapore 416061
Tel: +65 6448 8255
Fax: +65 6448 9833
Email: info@advancelab.com.sg

Thailand
Prima Scientific
Co., Ltd.

147 / 170 - 171 Baromrajchonnanee
Road, Arunamarin Bangkoknoi, Bangkok
10700, Thailand.
Tel: +66 2 884 9480
Fax: +66 2 884 6441
Email: primasci@primasci.com

Website:
www.advancelabglobal.com

Indonesia • Malaysia • Myanmar • Philippines • Singapore • Thailand