

# ResistLab®

---

PHENOLIC WORKTOP

Advanced



---

# PHENOLIC WORKTOP



Chemical Resistance grade Phenolic Worktop. Tested based on requirements of SEFA 8.1



# RESISTLAB®

A regional builder & manufacturer specializing in factory fit outs. ISO 9001 and ISO 18001 facilities. Phenolic worktops are the most commonly used tabletops in laboratories world wide. Up to 95% of all labs were phenolic tops. It has chemical resistance, high heat tolerance and is a robust material that is economical.

Here at Advancelab. we have ResistLab® that we regularly use for all segments of industries included

- ◆ MNC
- ◆ Tertiary Institutional
- ◆ Testing Laboratories
- ◆ QA / QC set ups
- ◆ Hospitals

Our work surfaces are molded with five thickness options:

- ◆ 10mm
- ◆ 13mm
- ◆ 16mm
- ◆ 18mm
- ◆ 20mm



- a) When tested at the specified drop height, the diameter of indentation shall not exceed 10 mm.  
b) L = in the longitudinal (or machine) direction of the fibrous sheet material (normally the direction of the longest dimension of the laminate).  
c) T = in the cross-longitudinal (cross-machine) direction of the fibrous sheet material (at right angles to direction L).  
d) Machine crosshead speed : 2 mm/min.  
e) Specimen type 1A : Machine crosshead speed 5 mm/min.



PSB Singapore

# PHYSICAL PROPERTIES

	Test Method	Property / Attribute	Unit (min. or max.)	Values			
<b>Resistance to Surface Wear</b>	10	Wear Resistance	Revolutions (min.) Initial point Wear value	150 350			
<b>Resistance to Impact by Large Diameter Ball</b>	21	Drop Height <sup>a)</sup>	mm (min.) (t=nominal thickness) 2.0 ≤ t < 6.0 6.0 ≤ t	1400 1800			
<b>Resistance to Scratching</b>	25	Force	Rating (min.) Textured finishes	3			
<b>Resistance to Dry Heat (180° C)</b>	16	Appearance	Rating (min.) Textured finishes	4			
<b>Resistance to Wet Heat (100° C)</b>	EN12721	Appearance	Rating (min.) Textured finishes	4			
<b>Resistance to Immersion in Boiling Water</b>	12	Mass Increase	5 (max.) 2.0 mm ≤ t < 5.0 mm t ≥ 5.0mm	5.0 2.0			
		Thickness Increase	% (max.) (t=nominal thickness) 2.0 mm ≤ t < 5.0 mm t ≥ 5.0mm	6.0 2.0			
		Appearance	Rating (min.) Textured finished	4			
<b>Dimensional Stability at Elevated Temperature</b>	17	Cumulative Dimensional Change	% (max.) (t=nominal thickness) 2.0 mm ≤ t < 5.0 mm L <sup>b)</sup> 2.0 mm ≤ t < 5.0 mm T <sup>c)</sup> t ≥ 5.0 mm L t ≥ 5.0 mm T	0.40 0.80 0.30 0.60			
			<b>Resistance Staining</b>	26	Appearance	Rating (min.) Groups 1&2 Group 3	5 4
			<b>Lightfastness (Xenon Arc)</b>	27	Contrast	Grey scale rating	4 to 5
			<b>Resistance to Water Vapour</b>	14	Appearance	Rating (min.) Textured finishes	4
<b>Resistance to Cigarette Burns</b>	30	Appearance	Rating (min.)	3			
<b>Resistance to Crazing</b>	24	Appearance	Grade (min.)	4			
<b>Flexural Modulus</b>	EN ISO 178 <sup>d)</sup>	Stress	Mpa (min.)	9000			
<b>Flexural Strength</b>	EN ISO 178 <sup>d)</sup>	Stress	Mpa (min.)	80			
<b>Tensile Strength</b>	EN ISO 527 <sup>e)</sup>	Stress	Mpa (min.)	60			
<b>Density</b>	EN ISO 1183	Density	kg/m <sup>3</sup> (min.)	1350			

## Test Method:

The test was conducted by applying 2 or 3 drops of each reagent on the specimen surface. The reagent shall be at room temperature. Cover the reagent with a glass cover.

After a period of testing contact time under room temperature, the glass cover was removed. The reagent was rinsed off with water. Then the specimen surface was inspected and evaluated from various angles at a distance of 400 mm.

## Rating:

**No effect:** No visible change of colour/corrosion/damage on surface

**Excellent:** Very slight change of colour, only visible at certain viewing angles

**Good:** Slightly change of colour on surface

**Fair:** Moderate change of colour on surface

**Failure:** Corrosion/ damage on surface



PSB Singapore

# CHEMICAL PROPERTIES

24-hour Contact Time	%	No Effect	Excellent	Good	Fair	Failure
Acetone	-	✓				
Alcohol (Buthanol)	-	✓				
Ammonia	25	✓				
Ammonia Chloride	10	✓				
Ammonia Thiocyanate	41	✓				
Ammonia Sulphate	33	✓				
Amyl Acetate	-	✓				
Methyl Ethyl Ketone	100	✓				
Benzene	-	✓				
Dicholoromethane	99	✓				
n-Buthyl Acetate	-	✓				
Cadmium Sulphate Hytrate (Saturated)	-	✓				
Lead Acetate Trihydrate	42	✓				
Lead Nitrate (Saturated)	-	✓				
Trisodium Phosphate	10	✓				
Magnesium Chloride (Saturated)	-	✓				
Magnesium Sulphate Heptahydrate	43	✓				
Methanol	-	✓				
Potassium Bromate (Saturated)	-	✓				
Potassium Bromate	30	✓				
Potassium Chloride (Saturated)	-	✓				
Potassium Hydroxide	49		✓			
Sodium Acetate	24	✓				
Potassium Sulphate (Saturated)	-	✓				
Isopropanol	-		✓			
Sodium Acetate (Saturated)	-	✓				
Calcium Chloride Dihydrate	41	✓				
Chloral Hydrate	54	✓				
Calcium Hydroxide (Saturated)	-	✓				
Chloroform	99.5	✓				
Copper Sulphate	10	✓				
Ethanol	-	✓				
Diethyl Ether	-	✓				
Chloral Hydrate	54	✓				
Calcium Hydroxide (Saturated)	-	✓				
Chloroform	99.5	✓				
Copper Sulphate	10	✓				

24-hour Contact Time	%	No Effect	Excellent	Good	Fair	Failure
Ethanol	-	✓				
Diethyl Ether	-	✓				
Ethyl Acetate	-	✓				
Glycerine	-	✓				
Sodium Carbonate (Saturated)	-	✓				
Sodium Chloride (Saturated)	-	✓				
Sodium Nitrate (Saturated)	-	✓				
Sodium Soluble (Saturated)	-	✓				
Thymol (Saturated)	-	✓				
Toluene	99	✓				
Tetrachloromethylene	99	✓				
Xylene	-	✓				
Zinc Chloride (Saturated)	-	✓				
Zinc Sulphate Heptahydrate	33.66	✓				

30-mins Contact Time	%	No Effect	Excellent	Good	Fair	Failure
Hydrofluoric Acid	15		✓			
Sulfuric Acid	60			✓		
Nitric Acid	60		✓			
Acetic Acid	100	✓				
Boric Acid	-	✓				
Citric Acid	30	✓				
Oxalic Acid	-	✓				

15-mins Contact Time	%	No Effect	Excellent	Good	Fair	Failure
Aluminium Chloride (Saturated)	-	✓				
Hydrogen Peroxide	30	✓				
Methylene Blue (Saturated)	-	✓				
Potassium Dichromate	-	✓				
Potassium Iodide (Saturated)	-	✓				
Potassium Permanganate (Saturated)	-	✓				
Sodium Thiosulphate (Saturated)	-	✓				
Potassium Nitrate (Saturated)	-	✓				
Sodium Sulphite (Saturated)	-	✓				
Sodium Hydroxide	49	✓				
Silver Nitrate	5			✓		

# FABRICATION



A US imported CNC Router gives us a wide way of ability to cut your phenolic to size. A high cut speed of 1,400 IPM and rapid traverse of 2,500 means no time is wasted when the 3000 Series cuts and moves. And you still get consistently high accuracy with each cut because the 3000 Series CNC router comes with a repeatability of 1/1000th of an inch!

We are able to fabricate and cut to size for any cutting patterns to minimise wastage.

type of job. We can produce



---

# TOP ORDERING INFORMATION

---

## 1) Colour Guide

P01034	P01597	P60200	P11000	P60300
Warm White	Warm Grey	Cold Grey	Light Blue	Black

## 2a) Standard Length

1200mm  
1500mm  
1800mm  
3670mm

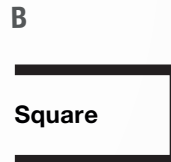
## 2b) Standard Width

600mm  
750mm  
900mm  
1530mm  
1850mm

## 2c) Standard Thickness

13mm  
16mm  
18mm  
20mm

## 3) Edge and Profile



## Bench Top Order No.

# ADPT-P11000-1200/600-13 B



Custom code  
for ResistLab®  
Phenolic  
worktop

Colour code refer to  
table 1:

Standard length  
sizes; refer to  
table 2a:

Standard  
width sizes;  
refer to  
table 2b:

Standard  
Thickness;  
refer to  
table 2c:

Standard  
finishing  
(edge); refer  
table 3:

\* Example of the order above:

Advancelab ResistLab Phenolic Worktop - Light Blue colour - 1200mm Length / 600mm Width - 13mm thickness , Square finishing

# SINKS

## 4a) Standard Length

1200mm  
1500mm  
1800mm

## 4b) Standard Width

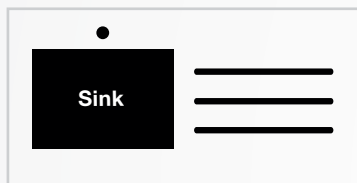
750mm

## 4c) Standard Thickness

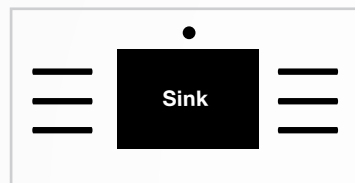
13mm  
16mm  
18mm  
20mm

## 5) Position

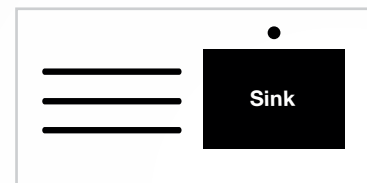
L



M



R



## Forged Sink Order No.

# ADPS-1500/750-18 M



Custom code for  
Phenolic forged  
sink



Standard length  
sizes; refer to  
table 4a:



Standard width  
sizes; refer to  
table 4b:



Standard  
Thickness;  
refer to  
table 4c:

Standard  
finishing  
(edge);  
refer  
table 5:

\* Example of the order above:

Advancelab ResistLab Phenolic Worktop - 1500mm Length / 750mm Width - 18mm thickness , Middle sink position



---

## Indonesia

PT. Advancelab Saintifik

Jl. Boulevard Raya Blok QJ 5 No. 23  
Kelapa Gading, Jakarta Utara, 14240  
Indonesia  
Tel: +6221 45854570  
Fax: +6221 45854570  
Email: info-id@advancelab-global.com  
Website: www.advancelab.com.sg

## Malaysia

Advancelab Sdn Bhd

KL Office: Unit B-1-10, Block B, No. 2,  
Jalan PJU 1A/7A, Oasis Square, Ara  
Damansara, 47301 Petaling Jaya,  
Selangor Darul Ehsan, Malaysia.  
Tel: +603 7831 0188  
Fax: +603 78310588  
Email: info-my@advancelab-global.com  
Website: www.advancelab.com.sg

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

## Myanmar

Advancelab Scientific &  
Engineering Co., Ltd

No(81/2), 7th Street, Than Thu Mar Road,  
(14/1)Quarter, South Okkalapa Township,  
11091 Yangon, Myanmar.  
Tel: +95 (1) 572393 / +95 (9) 779753802  
Fax: +95 (1) 572393  
Email: info-mm@advancelab-global.com  
Website: www.advancelab.com.sg

## Singapore

Advancelab (S) Pte Ltd

No.52 Senang Crescent,  
Singapore 416619  
Tel: +65 6448 8255  
Fax: +65 6448 9833  
Email: info@advancelab.com.sg  
Website: www.advancelab.com.sg

## Thailand

Advancelab (Thailand)  
Co., Ltd.

9/28, Village No 13, Bang Ramat  
Sub-district, Taling Chan District,  
Bangkok Metropolis, Thailand  
Tel: +65 6448 8255  
Fax: +65 6448 9833  
Email: info@advancelab.com.sg  
Website: www.advancelab.com.sg



Indonesia • Malaysia • Myanmar • Philippines • Singapore • Thailand • Vietnam