



Modified Acrylic Solid Surface

Composition/Information On Ingredients

Unsaturated Polyester Resin	UPR	N/A	
Poly Methyl methacrylate	PMMA	N/A	>30%
Methyl methacrylate	MMA	N/A	
Aluminum Trihydrate	ATH	21645-51-2	<70%
Pigment	Pigment	N/A	<1%
Additives	Additives	N/A	<1%

Technical Data

MODIFIED ACRYLIC SOLID SURFACE

Property	Test standard	Unit	12 mm
Raw density	ASTMD792-13 (Method A)	kg/m³	1750
Weight per square metre	-	kg/m²	21.0 9.74
Flexural modulus of elasticity	ASTM D790-15e2 (**)	Gpa	49.7 7.48
Flexural strength Tensile	ASTM D790-15e2 (**)	Mpa	25.3
modulus of elasticity Tensile	ASTM D638-14 (**)	GPa	
strength	ASTM D638-14 (**)	MPa	
Rockwell hardness	ASTM D785-08 (2015) (Procedure A)	-	86
Barcol hardness	JC/T 908/2013		62
Ball drop test	JC/T 908/2013		No Defects
Water absorption (24h Immersion)	ASTM D570-98(2010)e1 ASTM	%	0.03
IZOD impact strength	D256-10e1 (Method A)	J/m	19
Appearance (Discoloration, Crack) after heat water resistance	JIS K 6902 : 2008	-	No Defects
Appearance (Discoloration, Crack) after heat resistance	JIS K 6902 : 2008	-	No Defects
Accelerated weathering test (*) - Discoloration	KS M ISO 4892-2 : 2012	-	No Defects
Cigarette glow test	JC/T 908/2013	-	No Defects
Flammability	UBC8-1	-	Class A
Fungi and bacterial resistance	ASTM G21,22	-	No growth
Color stability	NEMA LD-3	-	Pass
Stain resistance	ANSIZ 124	-	Pass
Abrasion resistance	ANSIZ 124	-	Pass

*Typical results for 12mm Solid Surface colors unless gauge is specified. Properties may vary by aesthetic. These values are not intended for engineering calculations, if precise

Specification

Stain Resistance

Zameter an ideal product for stain resistance

1- Total stain resistance: $52 \leq 64$ (Standard)

2- Maximum individual depth of staining: $0.04\text{ mm} \leq 0.127\text{ mm}$

Note :- According to ANSI Z124.6-2007 • 5.2.1.1-5.2.1.5 total stain resistance rating shall be 52 and maximum individual depth of staining shall be 0.127mm. Individual stain rating as below;
1- non-staining. removable by tap water (using 20 scrub cycles);
2- removable by alcohol or naphtha (using 20 scrub cycles);
3 removable by first application of standard scouring powder (using 20 scrub cycles);
4- removable by two standard scouring powder scrubblings (using an additional 40 scrub cycles);
5. Any specimen with stain remaining after the aforementioned cleanings. Any specimen with stain remaining after the above cleanings shall be tested to determine the depth of staining. The affected area shall be sanded with 600 grit abrasive until the stain is removed. The depth shall be measured.

Reagents	Test Results			
	(Covered)		(Uncovered)	
	Individual Stain Rating	Depth Removed	Individual Stain Rating	Depth Removed
Black Crayon	1	/	1	/
Black Liquid Shoe Polish	5	0.02mm	5	0.02mm
Blue Washable Ink	5	0.02mm	5	0.02mm
Gentian Violet Solution	5	0.04mm	5	0.02mm
Beet Juice	1	/	1	/
Grape Juice	1	/	1	/
Lipstick	1	/	1	/
Hair Dye	1	/	1	/
Iodine Solution	4	/	4	/
Wet Tea Bag	2	/	2	/
Total Stain Resistance Rating	52			
Maximum Individual Depth Of Staining	0.04mm			

Chemical Resistance

Zameter is resistance to majority of the chemical products.

Note:- 1. "Affected": superficial surface changes which can be removed by sanding with 600 grit sandpaper, any resulting damage shall not impair the serviceability of the unit, and shall be easily repairable to original finish. 2. "Severe damage": Any resulting damage impairs the serviceability of the unit, and was not easily repairable to original finish.

Reagents	Test Results	
	(Covered)	(Uncovered)
Naphtha	Unaffected	Unaffected
Ethyl Alcohol	Unaffected	Unaffected
Amyl Acetone	Unaffected	Unaffected
Commercial Household Ammonia (10% V/V)	Unaffected	Unaffected
Citric Acid (10%)	Unaffected	Unaffected
Urea (6%)	Unaffected	Unaffected
Hydrogen Peroxide Solution (3%)	Unaffected	Unaffected
Concentrated Sodium Hypochlorite Solution (Effective Chlorine >8% -)	Unaffected	Unaffected
Toluene Ethyl Acetone	Unaffected	Unaffected
Lye Solution (2% Sodium Hydroxide)	Unaffected	Unaffected
Acetone Trisodium Phosphate (5%) Vinegar	Unaffected	Unaffected
Pine Oil	Unaffected	Unaffected
	Unaffected	Unaffected
	Unaffected	Unaffected

Fire Resistance

Zameter is ranking CLASS A in USA standard, which is the best grade for building materials.

Conclusion• Referto theNational Fire Protection Association Life Safety Code 101, "Interior Wall and Ceiling Finish Classification", the submitted sample meets the requirement of Class A.

Test Result Test data and observations

Maximum flame spread (ft): Time To 3.5
Maximum Spread: Fallout: 411 seconds.
FS*Time area (ft*min): Yes Test
Smoke area (%A*min): 22.1
47.4
Red oak smoke area (%A"min): 90.8

(fSI)	(SDI)
	10

Rating.:

The National Fire Protection Association Life Safety Code 101, -Interior Wall and Ceiling Finish Classification", has a means of classifying materials with respect to Flame Spread and Smoke Developed when tested in accordance with NFPA 255, (ASTM E84) "Method of Test of Surface Burning Characteristics of Building Materials'.

The classifications are as follows:

	Flame-spread index	Smoke-developed Index
Class A	0-25	0-450
Class B	26-27	0-450
Class C	76-200	0-450

Antimicrobial Activity Test

Zameter get the best grade – GRADE 0 for antimicrobial

- Notes:**
1. According to ASTM G 21-15 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi, observed fungi growth rating on the specimens include:
- 0 -None
 - 1 -Traces of growth (less than 10%)
 - 2 -Light growth (10 to 30%)
 - 3 -Medium growth (30 to 60%)
 - 4 -Heavy growth (60% to complete coverage)

2. History name of test organism

- A Historically known as A.niger.
- B Historically known as P.pinophilum.
- C Histoncally known as Gliocladium Wens.

3. *The microscope(50 X) was used to confirm the observation. oowwwnnn aass AGP..lpniingcoe

The reduction rate is 99.8% of microbial after 24 hours of

Test method: With reference to ASTM G 21-15
Test organism: Aspergillus brasiliensisA ATCC 9642, Penicillium funiculosumB 9ATCC 11797, Aureobasidium pullulans ATCC 15233, Chaetomium globosum ATCC 6205, Trichoderma WrensC ATCC 9645

Test Fungi	Concentration of spores (spores /mL)	Rating observed growth on specimdaeynss) (after 28
Aspergillus brasiliensisA ATCC 9642	1.0x106	0 Grade*
Penicillium lunlculasumsB ATCC 11797		
Aureobasidium pullulans ATCC 15233		
Chaetomlum globosum ATCC 6205		
Trichoderma WrensC ATCC 9645		

Test method: With reference to ASTM E 2180-07 (Reapproved 2012)
Test organism: Test organism: Staphylococcus aureus ATCC 6538

Name of test bacteria (Strain number)	Concentration of bacteria bacteria (cells/mL)		The antilog of the geometric mean of the number of organisms recovered from "Oh" (cfu/mL)	The antilog of the geometric mean of the number of organisms recovered from "24h" (cfu/mL)	Reduction (%)
Staphylococcus aureus ATCC 6538		Sample	/	2.3 x 104	99.8
		Control sample	1.2 x 106	1.7 x 107	