ARBORITE ARBOCHEM LAMINATES TECHNICAL DATA



<u>Manufacturer</u>

Arborite 385 Lafleur, Lasalle (Québec), H8R 3H7 Web site : <u>www.arborite.com</u> - Phone: 1-800-996-0366 Alternate manufacturing facility – Fletcher, NC

Product Description

ArboChem is a high-pressure laminate and a solid composite engineered for surfaces commonly exposed to acids, solvents, general reagents and cleaning agents. ArboChem is suitable for laboratory work surfaces, fume hood decks, fume hood liner panels, pegboards (drying racks), reagent racks, commercial countertops, cabinet drawer fronts, locker drawers, shelving, window sills, toilet partitions, and decorative casework components.

ArboChem laminate is available in 1 postforming grade and in 5 compact laminate grades.

Coordinated Products

ArboChem products can be color-coordinated with Arborite compact grade and Arborite thin grade laminates. Please note that the technology used in the manufacture of ArboChem results in a mild color differentiation between ArboChem and Arborite Compact Laminates and thin grade laminates. To facilitate color-coordination, custom samples are available. Send requests to <u>samples@arborite.com</u>, or call 1-800-361-8712. You may also contact your local sales representative.

Arborite ArboChem Color Availability

P500	P885	P886	P999	S405	S406	S407	S431	S463	S466	
S486	S513	S548	S550	W403						

ArboChem Surface Texture

Texture	Surface Gloss Level
Matte (MA) Finish –a fine beaded texture with a slight sheen	14-18

ArboChem PostformingThickness

Product Type	Imperial Measure (In.)	Metric Measure (Mm)
AC40	0.034" ± 0.005"	0.86 mm ± 0.127"

Standard Panel Size for ArboChem Postforming Laminates

Imperial Measure (feet)	Metric measure (mm)
4' x 8'	1220 mm x 2440 mm
5' x 10'	1525 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm

ArboChem Compact Laminate Thickness*

Product Type	Imperial Measure (In.)	Metric Measure (Mm)	Thickness Tolerance	Lbs/ Sq.Ft	Description
SO13 (1/8")	0.125"	3.2 mm	± 0.008"	0.9	Double Faced
SO25 (1/4")	0.250"	6.4 mm	± 0.012"	1.8	Double Faced
SO50 (1/2'")	0.500"	12.7 mm	± 0.021"	3.6	Double Faced
SO75 (3/4")	0.750"	19.0 mm	± 0.027"	5.4	Double Faced
S100 (1")	1.00"	25.4 mm	± 0.033"	7.2	Double Faced

* Thickness tolerance according to NEMA LD3-2005 for Compact Laminate grade (CGS)

ArboChem Compact Laminates Standard Panel Sizes

Imperial Measure (feet)	Metric measure (mm)
4' x 8'	1220 mm x 2440 mm
5' x 10'	1525 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm

ArboChem Compact Laminates Texture Availability

Texture	Surface Gloss Level
Matte (MA) Finish –a fine beaded texture with a slight sheen	14-18

ArboChem Compact Laminates Color Availability

P500	P885	P886	P999	S405	S406	S407	S431	S463	S466
S486	S513	S548	S550	W403					

ArboChem Postforming Technical Data

NEMA Test	ArboChem Values	NEMA HGP Values
Scratch Resistance	2.5 Newtons	N/A
Wear Resistance		
Sxxx colours ONLY	≥ 1500 cycles	
All other Arborite colors	≥ 700 cycles	400 cycles minimum
Boiling water Resistance		Slight Effect
3	No Effect	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
High Temperature Resistance	Slight Effect	Slight Effect
Radiant Heat Resistance	200	100 minimum
Stain Resistance		
- Reagents 1 - 10	No Effect	No Effect
- Reagents 11 - 15	No Effect	Moderate Effect
Dimensional Change		
Machine Direction	0.5 %	1.1 % maximum
Cross Direction	0.8 %	1.4 % maximum
Ball Impact Resistance	60 " (1524 mm)	30 " (508 mm)
Cleanability	10	20 maximum
Blister Resistance	70 seconds	55 seconds
Formability		
Face	5/8 " (16 mm)	5/8 " (16 mm)
Back	3/16 " (5 mm)	
Appearance	No ABC defects	No ABC defects

Arborite ArboChem Laminate - Chemical Reagent Staining Effect

Acids:

- 1. Acetic Acid (all concentrations)
- 2. Aqua Regia
- 3. Chromic Trioxide (Chromic Acid Cleaning Solution) *
- 4. Formic Acid (all concentrations
- 5. Glacial Acetic Acid 99% (concentrated)
- Hydrofluoric Acid 48% (concentrated)*
- 7. Hydrochloric Acid (all concentrations)
- 8. Nitric Acid (all concentrations)**
- 9. Perchloric Acid (concentrated)
- 10. Phosphoric Acid (all concentrations)
- 11. Picric Acid 1.2% (0.05M)
- 12. Sulfuric Acid (all concentrations)**
- 13. Tannic Acid (sat.)
- 14. Uric Acid (sat.)

Solvents:

- 15. Acetone
- 16. Amyl Acetate
- 17. Amyl Alcohol
- 18. Butyl Alcohol
- 19. Carbon Disulfide
- 20. 15. Carbon Tetrachloride
- 21. Chlorobenzene
- 22. Chloroform
- 23. Cresol
- 24. Dimethylformamide
- 25. Dioxane
- 26. EDTA
- 27. Ethyl Acetate
- 28. Ethyl Alcohol
- 29. Formaldehyde
- 30. Methanol
- 31. Methylene Chloride

Arborite ArboChem Laminate

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* Causes slight change of gloss or color.

Other items leave no effect

- 32. Methyl Ethyl Ketone
- 33. Naphthalene
- 34. n-Hexane
- 35. Phenol (all concentrations)*
- 36. Tetrahydrofura
- 37. Toluene
- 38. Trichloroethane
- 39. Xylene

Bases:

- 40. Ammonium Hydroxide (all concentrations)
- 41. Sodium Hydroxide (all concentrations)**
- 42. Sodium Sulfide 15%

General Reagents:

- 43. Alconox (Lab. Detergent)
- 44. Aluminon
- 45. Ammonium Phosphate
- 46. Aromatic Ammonia
- 47. Benedicts Solution
- 48. Calcium Hypochlorite (concentrated)
- 49. Camphorated parachlorophenol*
- 50. Cellosolve
- 51. Copper Sulfate
- 52. Ethylene Glycol
- 53. Eucalyptol
- 54. Formalin
- 55. Gasoline
- 56. Hydrogen Peroxide 3%
- 57. lodine
- 58. Karl Fisher Reagent
- 59. Kerosene
- 60. Lactated Ringers
- 61. Lysol™
- 62. Methyl Methacrylate
- 63. Mineral Oil
- 64. Monsel's Solution (Ferric Subsulfate)
- 65. Naphtha

pattern dependent. Request a sample for evaluation and chemical resistance testing

66. Petroleum Jelly

**Causes slight damage, with degree of damage proportionate to length of exposure and concentration.

Test procedure: Listed materials were placed in contact with Arborite ArboChem surface under 1" (25.4mm) diameter watch cover glass for 16 hours duration prior to evaluation for effect. The effects of staining are color and

- 67. Phosphate Buffered Saline (PBS)
- 68. Pine Óil
- 69. Potassium Permanganate
- 70. Povidone lodine
- 71. Procaine
- 72. Quaternary Ammonia Compounds
- 73. Silver Nitrate
- 74. Sucrose 50%
- 75. Sodium Azide
- 76. Sodium Chromate
- 77. Sodium Hypochlorite 5%
- 78. Sodium Thiocyanate
- 79. Thymol & Alcohol
- 80. Tincture of Mercurochrome
- 81. Tincture of lodine
- 82. Tincture of Merthiolate
- 83. Trisodium Phosphate 30%
- 84. Urea
- 85. Vegetable Oils
- 86. Water
- 87. Zephiran Chloride
- 88. Zinc Chloride
- 89. Zinc Oxide Ointment

Stains and Indicators:

- 90. Ag Eosin Bluish 5% in Alcohol
- 91. Bromothymol Blue
- 92. Cresol Red
- 93. Crystal Violet

97. Methyl Orange

99. Methylene Blue

101.Phenolphthalein

105.Wright's Blood Stain

4

98. Methyl Red

100.Nigrosine

102.Safranin O

104.Thymol Blue

103.Sudan III

94. Gentian Violet 1%95. Gram Stains96. Malachite Green

Limitations

Arborite ArboChem panels offer special protection for all kinds of laboratory work surfaces. However, no one material is suitable for all possible conditions; its properties should be checked for suitability under the specific conditions of each installation. The information provided herein is not intended for or to guarantee specific properties.

Standards & Approvals

Arborite laminates meet or exceed standard tests set by:

 The National Electrical Manufacturers Association "ANSI/NEMA LD 3-2005", for high pressure decorative laminates.

The purpose of this Standards Publication is to provide standard test methods and performance values for high-pressure decorative laminates.

- The GREENGUARD Environmental Institute[™] has awarded its GREENGUARD Indoor Air Quality Certification to Arborite. All Arborite laminate product types were tested under the stringent GREENGUARD Standards for low-emitting products. All GREENGUARD Indoor Air Quality Certified[®] products ensure minimal impact on the indoor environment. For a copy of the certificate, visit <u>www.greenguard.org</u>.
- Arborite is certified ISO 9001:2008 Quality Management System.
- Arborite is a member of the USGBC (US Green Building Council).
- Arborite is a member of the CaGBC (Canada Green Building Council).

Care and Maintenance

The decorative surface may be cleaned with warm water and mild soaps, such as those used for hands or dishes. The use of cleansers that contain abrasives, acids or alkalis may damage the decorative surface. (Note: See chemical and Stain Resistance section for more detailed information on chemical and stain resistance results.) Stubborn stains may be removed with a 1.5 minute exposure to hypochlorite bleach, such as Clorox®, followed by a clean water rinse.

<u>Warranty</u>

Arborite, division of Wilsonart Canada ULC, warrants that, under normal use and service, the material and workmanship of its products shall conform to the standards set forth on the applicable technical data sheets for a period of twelve (12) months from the date of sale to the first consumer purchaser. Dealers and distributors are provided with the technical data sheets which contain specific standards of performance for the products. In the event that an Arborite product does not perform as warranted, the first purchaser's sole remedy shall be limited to repair or replacement of all or any part of the product which is defective, at the manufacturer's sole discretion.

This warranty applies only to product :

- 1. In its original installation; and
- 2. Purchased by the first consumer purchaser.

This warranty is not transferable, and expires upon resale or transfer by the first consumer purchaser.

This warranty shall not apply to defects or damage arising from any of the following :

- 1. Accidents, abuse or misuse;
- 2. Exposure to extreme temperature;
- 3. Improper fabrication or installation; or
- 4. Improper maintenance.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE MADE. UNDER NO CIRCUMSTANCES SHALL THE MANUFACTURER BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. NO FABRICATOR, INSTALLER, DEALER, AGENT OR EMPLOYEE OF ARBORITE, A DIVISION OF WILSONART CANADA ULC, HAS THE AUTHORITY TO MODIFY THE OBLIGATIONS OR LIMITATION OF THIS WARRANTY.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state; therefore, some of the limitations stated above may not apply to you. It is to your benefit to save your documentation upon purchase of a product.

Specification Form:						
Surface shall be Arborite ArboChem Postforming Laminate						
Produced by Arborite,						
Туре: АС40 (0,034")						
Surface						
Color Number:		Color Name:				
Finish						
Code:	<u>MA</u>	Name:	MATTE			

Specification Form:							
Surface shall be Arborite ArboChem Compact Laminate							
Produced by Arborite,							
Type: S013 (1/8"), S025 (1/4"), S050 (1/2"), S075 (3/4"), S100 (1")							
Surface	Surface						
Color Number:	Color Name:						
Finish							
Code: <u>MA</u>	Name:	MATTE					