

# ArboChem

---

*Arborite's chemical and stain-resistant laminate*

ArboChem is a special category of decorative panels engineered to resist a variety of acids, solvents, general reagents and cleaning agents.

## **Design & Performance:**

ArboChem is a high-pressure laminate and a solid composite engineered for surfaces commonly exposed to acids, solvents, general reagents and cleaning agents. Certified as an "anti-static protective material" by the American Society for Testing and Materials (ASTM D257-78), 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 panels provide exceptional chemical and stain resistance with the flexibility and design advantage of Arborite laminate.

ArboChem laminate is available in postforming grade (0.039"/1.0 mm) and in various solid phenolic compact laminate grades. With a choice of over 200 colors, industrial-strength resistance does not require an industrial look.

## **Surface Textures:**

ArboChem laminate is available with two surface textures:

- 1) *Matte (MT)*: A fine, matte texture with a slight sheen
- 2) *Quartz (QM)*: A fine, beaded texture that minimizes smudges and finger marks

## **Coordinated Products:**

ArboChem products can be color-coordinated with Arborite Classic compact-grade and Arborite Flex4 thin-grade laminates. Please note that the technology used in the manufacture of ArboChem results in a mild color differentiation between ArboChem and Arborite Classic and Flex4 laminates. To facilitate color-coordination, custom samples are available. Send requests to [samples@arborite.com](mailto:samples@arborite.com), or call 1-800-361-8712. You may also contact your local sales representative.

## Chemical and Stain Resistance Tests:

**Procedure:** The following reagents were placed in contact with an ArboChem laminate surface and placed under a 1" (25.4 mm)-diameter watch cover glass for 16-24 hours before being evaluated, in accordance with NEMA LD3-2000 test methodology and SEFA 8-1999 testing requirements. The effects of staining are color and pattern dependant. Arborite invites you to request a sample for evaluation and chemical resistance testing.

**Results:** Below is a summary of the test results collected with commonly-used chemicals and staining agents.

<b>Acids:</b>	Toluene	Povidone Iodine
Acetic Acid (all concentrations)	Trichloroethane	Procaine
Aqua Regia **	Xylene	Quaternary Ammonia Compounds
Chromic Trioxide (Chromic Acid Cleaning Solution)*	<b>Bases:</b>	Silver Nitrate
Formic Acid (all concentrations) *	Ammonium Hydroxide (all concentrations)	Sodium Azide
Glacial Acetic Acid 99% (concentrated) *	Sodium Hydroxide (all concentrations) **	Sodium Chromate
Hydrochloric Acid (all concentrations)	Sodium Sulfide 15%	Sodium Hypochlorite 5%
Hydrofluoric Acid 48% (concentrated) *	<b>General Reagents:</b>	Sodium Thiocyanate
Nitric Acid (all concentrations) **	Alconox (Lab. Detergent)	Sucrose 50%
Perchloric Acid (concentrated)	Aluminon	Thymol & Alcohol
Phosphoric Acid (all concentrations)	Ammonium Phosphate	Tide™
Picric Acid 1.2% (0.05M)	Aromatic Ammonia	Tincture of Iodine
Sulfuric Acid (all concentrations) **	Benedicts Solution	Tincture of Mercurochrome
Tannic Acid (sat.)	Blood	Tincture of Merthiolate
Uric Acid (sat.)	Calcium Hypochlorite (concentrated)	Trisodium Phosphate 30%
<b>Solvents:</b>	Camphorated para-chlorophenol *	Urea
Acetone	Cellosolve	Vegetable Oil
Amyl Acetate	Coffee, black	Vinegar
Amyl Alcohol	Copper Sulfate	Water
Butyl Alcohol	Ether, 1:20	Zephiran Chloride
Carbon Disulfide	Ethylene Glycol	Zinc Chloride
Carbon Tetrachloride	Eucalyptol	Zinc Oxide Ointment
Chlorobenzene	Formalin	<b>Stains and Indicators:</b>
Chloroform	Gasoline	Ag Eosin Bluish 5% in Alcohol
Cresol	Hydrogen Peroxide 3%	Bromothymol Blue
Dimethyl formamide	Iodine	Cresol Red
Dioxane	Karl Fisher Reagent	Crystal Violet
EDTA	Kerosene	Gentian Violet 1%
Ethyl Acetate	Lactated Ringers	Gram Stains
Ethyl Alcohol	Lysol™	Malachite Green
Formaldehyde	Methyl Methacrylate	Methyl Orange
Methanol	Milk, homogenized	Methyl Red
Methyl Ethyl Ketone	Mineral Oil	Methylene Blue
Methylene Chloride	Monsel's Solution (Ferric Subsulfate)	Nigrosine (India Ink)
Naphthalene	Naphtha	Phenolphthalein
n-Hexane	Orange juice	Safranin O
Phenol (all concentrations)*	Petroleum Jelly	Sudan III
Tetrahydrofuran	Phosphate Buffered Saline (PBS)	Thymol Blue
	Pine Oil	Wright's Blood St
	Potassium Permanganate	

Test procedure: Listed materials were placed in contact with Arborite® Laboratory Grade surface under 1" (25.4mm) diameter watch cover glass for 16-24 hours duration prior to evaluation for effect. The effects of staining are color and pattern dependent. Request a sample for evaluation and chemical resistance testing

\* Causes slight change of gloss or color.

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

Other items leave no effect

**ArboChem postforming-grade laminate specifications:**

Nominal panel thickness:

Imperial Measure	Metric Measure	Thickness Tolerance
0.039"	1.0 mm	± 0.005"/0.12 mm

Standard Panel Sizes:

IMPERIAL MEASURE	METRIC MEASURE
3' x 8'	915 mm x 2440 mm
4' x 8'	1220 mm x 2440 mm
4' x 10'	1220 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm

**ArboChem solid phenolic core panel specifications:**

Nominal panel thickness\*:

Imperial Measure	Metric Measure	Thickness Tolerance	Lbs/Sq.Ft
1/8"	3.2 mm	± 0.012"	0.9
1/4"	6.4 mm	± 0.0125"	1.81
3/8"	9.6 mm	± 0.0187"	2.72
1/2"	12.7 mm	± 0.025"	3.62
5/8"	15.9 mm	± 0.0312"	4.53
3/4"	19.0 mm	± 0.037"	5.40
1"	25.4 mm	± 0.050"	7.24
1 ¼ "	32.0 mm	± 0.0625"	9.00

\* Thickness tolerance according to NEMA LD3-2000 for 2000 for Compact Laminate grade (CGS)

**Standard Panel Sizes:**

IMPERIAL MEASURE	METRIC MEASURE
4' x 8'	1220 mm x 2440 mm
4' x 10'	1220 mm x 3050 mm
5' x 8'	1525 mm x 2440 mm
5' x 10'	1525 mm x 3050 mm
5' x 12'	1525 mm x 3660 mm

**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.

### **Care and Maintenance**

To clean solid grade laminate surfaces, simply wipe with a soft damp cloth and mild detergent; then rinse thoroughly with warm water and wipe dry. For stubborn stains, use an all-purpose cleaner, with a damp cloth; then rinse thoroughly with warm water and wipe dry.

For really tough stains, create a paste composed of baking soda and water. Using a soft brush, scrub gently in a circular motion - 10 to 20 strokes should remove most stains; then rinse thoroughly with warm water and wipe dry. Keep in mind that excessive scrubbing can dull or damage the finish.

## Warranty

Arborite, division of ITW Canada, 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 ITW CANADA , 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.