



Arcoplast Fiberglass Composite Panels and the Sealant/Finishing Compound Chemical / Stain Resistance ISO 2812-4:2007

Chemical reagents were placed on the surface for 72 hours*. After the 72 hour period, reagents were removed using the cleaning methods described in each referenced standard. There were twelve chemicals to which the test panels showed resistance.

These include chromic acid (10%), chromic acid (30%), hydrochloric acid (36.5-38.0%), BIRKO - FOMACID -10043, nitric acid (10%), nitric acid (100%), sodium hydroxide (10%), sodium hydroxide (40%), sodium hypochlorite (10%), sulfuric acid (30%), STERIS - Coverage Plus NPD, and Steris - SPOR KLENZ. Of these only nitric acid (100%) showed blistering while the rest showed some degree of discoloration or change in gloss. Some of the discoloration were very faint, and seen only under certain lighting, more indicative of a change in gloss/finish.

Chemical & Stain Resistance - Arcoplast	Arcoplast Panel Defects	Arcoplast Sealant Defects
Acetic Acid (10%)	none	none
Acetic Acid (Glacial)	none	none
Acetone	none	none
Ammonium Carbonate (10%)	none	none
Ammonium Chloride (10%)	none	none
Ammonium Hydroxide (28-30%)	none	none
Benzene	none	none
Calcium Chloride (10%)	none	none
Carbon Tetrachloride	none	none
Chlorine Dioxide	none	none
Chloroform	none	none
Chromic Acid (10%)	Degree of change in gloss 1 (S2); Intensity 1	Degree of discoloration 2 (S4); Intensity 5
Chromic Acid (30%)	Degree of change in gloss 1 (S2); Intensity 1	Degree of discoloration 2 (S4); Intensity 5
Diethyl Ether	none	none
Diethyl Phthalate	none	none
Ethyl Acetate	none	none
Ethyl Alcohol (30%)	none	none
Ethyl Alcohol (95%)	none	none
Ethylene Dichloride	none	none
Ethylene Glycol	none	none
Formaldehyde	none	none
Formalin	none	none
Glycerin	none	none
Hexane	none	none
Hydrochloric Acid (36.5-38%)	Degree of discoloration 1 (S5); Intensity 2	none
Hydrogen Peroxide (6%)	none	none
BIRKO - FOAM CHLOR 535 - 102588	none	none
BIRKO - FOMACID - 100043	none	Degree of discoloration 2 (S4); Intensity 3
BIRKO - LIQUIK 5 - 100138	none	none
Isopropyl Alcohol	none	none
Lactic Acid (10%)	none	none
Lacquer Thinner	none	none
Liquid Formalin (10%)	none	none
Methyl Alcohol (30%)	none	none
Methyl Alcohol (100%)	none	none
Methyl Ethyl Ketone	none	none
Methylene Chloride	none	none
Microchem (10%)	none	none
Nitric Acid (10%)	Degree of discoloration 1 (S2); Intensity 2	Degree of discoloration 1 (S2); Intensity 2
Nitric Acid (100%)	Degree of blistering 5 (S3); Intensity 5	Degree of blistering 5 (S3); Intensity 5
Peracetic Acid (5%)	none	none
Phenol (5%)	none	none
Sodium Chloride	none	none
Sodium Hydroxide (10%)	Degree of discoloration 1 (S5); Intensity 3	none
Sodium Hydroxide (40%)	Degree of discoloration 1 (S5); Intensity 3	none
Sodium Hypochlorite (10%)	Degree of change in gloss 1 (S4); Intensity 1	none
Sulfuric Acid (3%)	none	none
Sulfuric Acid (30%)	none	Degree of change in gloss 1 (S4); Intensity 1
Toluene	none	none
Trichloroethylene	none	none
Turpentine	none	none
Ultra Pure Water	none	none
Wescodyne - ppm	none	none
Xylene	none	none
STERIS - Coverage plus NPD	Degree of change in gloss 1 (S4); Intensity 1	none
STERIS - LPH	none	none
STERIS - SPOR KLENZ	Degree of change in gloss 1 (S4); Intensity 1	none

Chemical reagents were placed on the surface for 72 hours*. After the 72 hour period, reagents were removed using the cleaning methods described in each referenced standard.

Reagent	Stain Resistance - Arcoplast Panel	Stain Resistance - Arcoplast Sealant
Blood (Beef)	2*	2*
Butter	1*	1*
Iodine	2*	2*
Mustard	2*	3*
Potato	1*	1*
Red Cabbage	1*	1*
Tea	1*	1*
Coffee	1*	1*
Tomato Acid	1*	1*
Red Wine	1*	1*

*Stain Resistance Ranking Legend

- 1 = Unaffected = wipes off easily with damp and mild soad, no color or surface change
- 2 = Superficial = stain removed easily with water and / or mild abrasive
- 3 = Considerable = stain no completely removable

Rating - Quantity of Defects

- 0 - None, i.e. no detectable defects
- 1 - Very few, i.e. small, barely significant number of defects
- 2 - Few, i.e. small but significant number of defects
- 3 - Moderate number of defects
- 4 - Considerable number of defects
- 5 - Dense pattern of defects

Rating - Size of Defects

- 0 - Not visible under x10 magnification
- 1 - Only visible under magnification up to x10
- 2 - Just visible with normal corrected vision
- 3 - Clearly visible with normal corrected vision (up to 0.5mm)
- 4 - 0.5mm to 5mm
- 5 - Larger than 5mm

Rating - Intensity of Change

- 0 - Unchanged, i.e. no perceptible change
- 1 - Very slight, i.e. just perceptible change
- 2 - Slight, i.e. clearly perceptible change
- 3 - Moderate, i.e. very clearly perceptible change
- 4 - Considerable, i.e. very clearly perceptible change
- 5 - Very marked change