



Technical Data Information

A-1300 Concrete Seal

Acrylic Urethane

Description

A-1300 is a premium quality crystal clear acrylic urethane that provides a tough, durable surface.

Advantages

- Abrasion resistant
- Chemical resistant
- Stain Resistant
- Non Yellowing
- Repels oil, grease & water

Uses

- Interior or exterior surfaces
- Concrete Floors
- Walk ways
- Patios
- Pools
- Pavers
- Brick Walls
- Wood

Finish

- A-1300 High gloss
- Package Size: 1Gallons & 5 Gallons
- Color: Clear

Surface Preparation

Clean the floors to be coated by removing any oil, grease, or other contaminants that might interfere with the proper adhesion of the A-1300 Acrylic Urethane. Ensure that floors are structurally sound and fully cured a minimum of 28 days. Test the floor for vapor drive in accordance with ASTM D4263. Mechanical profiling is the preferred floor-preparation method. Mechanically profile the floor to a medium-grit sandpaper texture and remove curing and parting compounds and other surface hardeners and floor coatings. Acid may be used to etch bare concrete floors to the proper profile when mechanical abrasion is impractical. Make sure the surface is thoroughly clean before etching. Etch all unpainted cement with 1 part 10% muriatic acid to 1 part water. Allow to stand 10-15 minutes then rinse clean with water. After etching, neutralize acid with baking soda or soda ash then rinse thoroughly with water. A properly etched concrete surface should resemble the texture of fine or medium sandpaper. Let dry thoroughly before applying coating.

Test area

Apply a test area to ensure proper appearance and adhesion.

Application Specifics

Important weather guidelines:

1. Apply on warm, clear, sunny days.
2. Do not apply under foggy conditions.
3. Do not apply when rain is forecast within 24 hours.
4. Do not apply if temperatures are expected to drop below 50°F within 24 hours.
5. Apply 2 thin coats for best results. (Use 1/4" or 3/8" nap roller cover).

Do not apply in direct sun light over 75 degree.

Coverage

A-1300 Acrylic Polyurethane Top Coat may be rolled, brushed or sprayed. The coverage will vary with surface porosity and profile. You can expect up to 400 square feet per gallon on a smooth surface and between 250 to 350 square feet per gallon on a rough surface. For best results apply two thin coats. A-1300 can be thinned with up to two parts of water.

Application

Brush, roll or spray. **DO NOT SHAKE.** Shaking will cause air bubbles. Stir gently and thoroughly before application. This product appears milky when wet, but dries rapidly to a beautiful clear coating.

Important

Do not apply late in the day or when dew, rain, fog or mist is likely (moisture will damage the fresh paint film). Apply at temperatures above 50 degrees F. Do not apply if temperatures below 45 degrees are expected within 24 hours. Cold weather or excess humidity or a sudden temperature drop will greatly affect any finish at the time of application. Dampness can dull the gloss. Do not paint in direct sun. Use a clean brush or roller. For maximum durability, we recommend at least two thin coats.

Drying Time

Dries within 30 minutes and can be recoated in 4 hours. Ready for use 12 hours. Drying time will vary with weather conditions, air circulation and temperature.

Thinning

Thinning is not recommended. A-1300 can be thinned with up to two parts of water.

Clean-up

Clean tools and hands with warm soapy water and rinse thoroughly.

CHEMICAL RESISTANCE

(1.0 mil dry films on cold rolled steel, air dried 7 day)
 Toluene, 1 hour immersion No Effect
 Gasoline, 1 hour immersion No Effect
 1 N NaOH, 1 hour spot test No Effect
 Solvent Resistance (ASTM D-4752):
 MEK (100 double rubs) Pass
 Toluene (100 double rubs) Pass
 Mandrel Bend Flexibility,(ASTM D-1737) 1/8 in
 Cleveland Cabinet Humidity Resistance
 (100F, 100% RH,700 hours)
 Blistering (ASTM D714) Few, #8
 Loss in Gloss No Effect

RESISTANCE PROPERTIES

(per ANSI/KCMA A161.1-1990)Test 9.3.2.

24 Hour Tests

Vinegar No Effect
 Lemon Juice No Effect
 Orange Juice No Effect
 Grape Juice No Effect
 Tomato Catsup No Effect
 Coffee(115°F) No Effect
 Olive Oil No Effect
 100 Proof Alcohol No Effect
 One Hour Test:
 Mustard No Effect
 Hot and Cold Check Cycles Passes 10 cycles

ADHESION CHARACTERISTICS

(1.0 mil dry films air dried seven days)

Masonry
 Concrete Excellent
 Stucco Excellent
 Plaster Excellent
 Mortar Excellent
 Metal
 Untreated Cold Rolled Steel Excellent
 Bonderite 100 Excellent
 Bonderite 1000 Excellent
 Tin Plate Excellent
 Untreated Aluminum Excellent
 Anodized Aluminum Excellent
 Plastic
 Polycarbonates Excellent
 High Density Polyethylene Selective
 ABS Selective
 Nylon Selective
 Flexible Vinyl Selective

PHYSICAL PROPERTIES

Solids content by weight 31-33%
 Solids content by volume 30-32%
 Maximum V.O.C. 250 grams per liter

FILM PROPERTIES

Drying time: (70°F, 50% RH)
 Set to touch < 15 min
 Tack-Free < 20 min
 Dry Hard < 30 min
 Pencil Hardness HB
 Direct Impact >160
 Reverse Impact > 160
 Taber Abrasion 50.5 mg
 60° Gloss (ASTM D-1308): > 90
 Contrast Ratio (ASTM 2805): > 90

Adhesion:

Dry Tape Test (ASTM D-3359) 5A
 Dry Scrape Adhesion (ASTM D-2197) 9 kg

Wet Tape (24 hr/70°F) 5A
 Wet Tape (4 days/70°F) 5A

Weathering:

QUV - "B Bulb" (1000 hr)
 (ASTM D-4587-91) >92% gloss retention,
 1.6 Delta E color change
 Xenon Arc (1000 hr)
 (ASTM G-26-92) >94% gloss retention
 Heat Resistance (24 hr/250°F) <2.0 Delta E color change

CHEMICAL RESISTANCE (ASTM D-1308)

Hydraulic Fluid (24 hr/150°F) Pass
 Acid, 5% H2SO4 Spot, pH=0.6 No effect after 24 hr
 Base, 5% NaOH Spot, pH= 13.5 No effect after 6 hr
 Water Immersion (24 hr/70°F) Pass

5 Minute Spot Test

Gasoline (87) OK
 Diesel Fuel OK
 Brake Fuel Dissolve
 Skydrol Softening**
 Xylene OK*
 10% Acetic Acid OK
 10% HCL OK
 Methanol OK*
 Ammonia OK

1Hour Spot Test

Gasoline (87) OK
 Diesel Fuel OK
 Brake Fuel Dissolve
 Skydrol Softening**
 Xylene OK*
 10% Acetic Acid OK
 10% HCL OK
 Methanol OK*
 Ammonia OK

* Loss of Gloss

**Softening and Yellowing

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This product contains chemicals known to the State of California to cause cancer, birth defects and reproductive harm. The maximum V.O.C. of this product does not exceed 250 grams/liter. **WARNING!** If you scrape, sand or remove old paint, you may release lead dust. **LEAD IS TOXIC.** Contact the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.