

ACRYLEX 100

FAST DRY EXTERIOR ACRYLIC FINISH

Technical Data & Application Instructions

PRODUCT DESCRIPTION

ACRYLEX 100 is a single component, fast-drying, semi-gloss acrylic finish. It was specifically developed to replace solvent-based enamels commonly used for industrial and commercial use. ACRYLEX 100 retains its gloss and color stability even on exterior surfaces subject to high ultraviolet exposure and chemical fallout. The hard, slick finish reduces build-up of dirt, dust and other airborne pollutants.

ACRYLEX 100 exhibits excellent wear resistance, superior weathering characteristics and conforms to all local, state and federal environmental and VOC requirements.

BASIC USES

ACRYLEX 100 was specifically developed for protection of properly primed metal, concrete, wood, fiberglass, plastic, Formica, glass and other surfaces that are subject to corrosion and ultraviolet exposure. ACRYLEX 100 resists exterior exposure much better than alkyd-based enamels, and can be used for interior applications. In addition to its outstanding weather resistant properties, ACRYLEX 100 also exhibits excellent abrasion and impact resistance for high use and high visibility areas.

ACRYLEX 100 is used in industries such as chemical, food processing, hydroelectric, pulp and paper and plant maintenance. Some of its more basic uses include tank exteriors, industrial equipment, machinery, piping and bridges.

ACRYLEX 100 semi-gloss can also be used on exterior concrete, brick, masonry and other surfaces for creating highly visible graphics and a more readily cleaned surface.

COLORS

ACRYLEX 100 is available in standard White, as well as an unlimited selection of custom colors. Color chips must be furnished to UNITED for all custom colors.

TYPICAL PROPERTIES TABLE 1

Solids by Weight	45% (± 1)	ASTM D 2369
Solids by Volume	34% (± 1)	ASTM D5201
Viscosity	1200 cps	ASTM D562
Weight per Gallon	9.8 lbs (± 2)	ASTM D1475
Gloss	65-70 (60° Gardner)	ASTM D523
Dry Time to: Touch Recoat	@ 75°F, 50% RH 15 to 20 Minutes 45 Minutes	ASTM D1640
Pencil Hardness	HB	ASTM D3363
Flexibility	1/8" Mandrel@ 65°F	ASTM D522
Accelerated Weathering	97% Gloss Retention @ 1,000 hours	ASTM G53
Chemical Resistance		ASTM D2792
Diesel	No Effect	
Transmission Fluid	No Effect	
Gasoline	No Effect	
Motor Oil	No Effect	
Brake Fluid	Softened	
Mustard	No Effect	

ADVANTAGES

- **SUPERIOR ADHESION** – Bonds to a wide variety of properly prepared surfaces including steel, aluminum, galvanized metal, wood, fiberglass, Formica and glass.
- **GLOSS AND COLOR STABILITY** – Retains its surface sheen and color even in areas of harsh UV exposure.
- **EXCELLENT FLEXIBILITY** – The acrylic resins utilized allow for maximum flexibility characteristics. It will not become brittle with age.
- **VOC COMPLIANT** – Water-based formulation conforms to all local, state and federal environmental regulations and VOC requirements.

PACKAGING & MIXING

ACRYLEX 100 is a single component, ready to use material available in 1-gallon (3.8 liter) cans, 5-gallon (19 liter) pails and 55-gallon (209 liter) drums.

Mix the material thoroughly prior to use until an even consistency is achieved using a power mixer capable of mixing the contents of the entire container. Reducing the material is not normally necessary, however, thinning **ACRYLEX 100** 10 to 20% with water will facilitate application by brush or roller, or in other applications where a thinner consistency is desired.

SURFACE PREPARATION

All surfaces must be clean and dry, and free from dirt, grease, oils, pollution fallout, surface chemicals, rust, scale and other foreign contaminants that may interfere with optimum adhesion.

Any existing paint or coating, if not completely removed, shall be checked to verify that it is tightly adhered to the substrate and free from corrosion. Prior to coating over any existing paint or coating, a test area must first be applied to verify compatibility and adhesion. Glossy surfaces must be dulled by abrading the surface using brush blasting, sanding or other mechanical means. **ACRYLEX 100** can also be applied directly to a variety of pre-primed surfaces. Always spot test over a small section to confirm compatibility and adhesion.

When **ACRYLEX 100** is applied directly to concrete, steel, wood or fiberglass substrates, the following surface preparation procedures are recommended:

METAL SURFACES: All metal surfaces must be free of rust scale, forming oils, metal slivers and weld slag. Metal surfaces must be chemically cleaned or blast abraded according to the specific project requirements.

The cleaned or blasted surface shall be primed by the end of the same work day, but in any event before any visible rusting occurs. If rusting occurs after cleaning, the surfaces must be recleaned prior to coating.

Prime properly prepared metal surfaces using UNITED'S **Acrylex 400** Primer or **Lock-Down**, depending upon specific project requirements and specifications, at approximately 250 sq. ft. per gallon (6.1 m²/l).

CONCRETE SURFACES: Concrete surfaces must be free from curing agents, form release agents, surface chemicals, sharp projections, ridges and loose aggregate.

Sandblasting of concrete will be necessary if the surfaces are contaminated to the point that acid, chemical cleaning or power washing is not sufficient for removal. Concrete surfaces having a smooth, steel trowelled finish should be acid etched or sandblasted.

Concrete surfaces shall be primed with one (1) coat of UNITED'S **Uniseal** at the rate of approximately 250 sq. ft. per gallon (6.1 m²/l).

WOOD SURFACES: Wood shall be free from dust, ridges and projections. Fill any imperfections with a quality wood filler or urethane caulk and strike smooth.

Surfaces shall be primed with one (1) coat of UNITED'S **Acrylex 400** at the rate of 250 to 300 sq. ft. per gallon (6.1 to 7.3 m²/l).

OTHER SURFACES: **ACRYLEX 100** adheres directly to most clean fiberglass and plastic surfaces. New or dense surfaces should be scuff-sanded. Severely oxidized or chalky surfaces must be primed with one coat of **Uniseal** at the rate of 250 to 300 sq. ft. per gallon (6.1 to 7.3 m²/l).

APPLICATION

ACRYLEX 100 may be applied by airless spray, air-atomized airless or conventional spray equipment. Brush or roller may also be used for small or confined areas, or other situations where spray application is not practical. **ACRYLEX 100** also lends it self to application by dipping.

Airless spray is the preferred method. Any airless spray equipment capable of 1,000 psi (6895 kPa) and ½ gallon per minute (1.9 l/minute) delivery can be used. A reversible, self-cleaning tip with an orifice size of .013" to .019" and a minimum of 40° fan angle is recommended. A fine-finish tip will aid in achieving the smoothest possible finish.

ACRYLEX 100 should normally be applied in a minimum of 2 separate coats. Coverage rate will vary with surface profile, application conditions and project requirements. Typical application rate is 200 to 250 sq. ft. per gallon (4.8 to 6.1 m²/l) per coat. Highly corrosive or other severe conditions will require either an additional coat, or heavier application rate to achieve optimum protection.

Recoating can be done at any stage of cure, provided the film is dry to the touch. Totally cured films should be scuff-sanded before recoating.

Use water and UCC Cleaner to thoroughly flush equipment. Purge the water from the system using Mineral Spirits or Cellosolve solvent. Leave the solvent in the lines until next use.

LIMITATIONS & PRECAUTIONS

ACRYLEX 100 will freeze and become unusable below 32°F (0°C). Do not ship or store unless protection from freezing is available.

Do not apply if conditions will not permit complete cure before rain, dew or freezing temperatures occur. Do not apply in the late afternoon if moisture condensation can appear during the night. Do not apply **ACRYLEX 100** at temperatures below 50°F (10°C), or when there is a possibility of temperatures falling below 32°F (0°C) within a two hour period after application.

ACRYLEX 100 may be an irritant to skin. Avoid breathing of vapor or spray mist. Approved MSHA/NIOSH chemical cartridge respirator must be worn by applicator. Avoid contact with eyes and skin.

For additional information, refer to OSHA guidelines and **ACRYLEX 100** Material Safety Data Sheet.



Our products are guaranteed to meet established quality control standards. Information contained in our technical data is based on laboratory and field testing, but is subject to change without prior notice. No guarantees of accuracy are given or implied, nor does UNITED assume any responsibility for coverage, performance or injuries resulting from storage, handling or use of our products. Liability, if any, is limited to product replacement or, if applicable, to the terms stated within the executed project warranty.