ACRYLEX 400

UNIVERSAL ACRYLIC PRIMER FOR METAL, MASONRY & WOOD

Technical Data & Application Instructions

PRODUCT DESCRIPTION

ACRYLEX 400 is a single component, premium quality exterior acrylic latex primer that is blister and stain resistant, permanently flexible and highly durable. It exhibits excellent corrosion resistance over metal substrates, alkali resistance over concrete and masonry, and tannin-blocking ability over wood surfaces. Because of its application versatility, **ACRYLEX 400** can be topcoated with a wide variety of finish coats. Its fast dry quality, weather resistant characteristics and extended open time, also make it an effective shop primer.

ACRYLEX 400 is a water-based, medium viscosity material, and conforms to all local, state and federal environmental and VOC requirements.

BASIC USES

ACRYLEX 400 is effective in providing corrosion protection, flash rust resistance and enhanced adhesion over steel, aluminum and galvanized metal surfaces. It can be applied over lightly (or "flash") rusted to moderately rusted, sound surfaces. Areas that exhibit heavy rust should be primed with UNITED'S **Lock-Down**. Scaly rusted metal must be brought into sound condition or be replaced. **Roof Mate**, **Roofshield**, **Diathon** and **Acrylex 100** all achieve outstanding adhesion to **ACRYLEX 400**.

ACRYLEX 400 can be used over new or unpainted wood, where it is effective at blocking tannin bleed-through. It is also effective at locking down residual chalkiness on previously painted exterior surfaces. Over concrete and masonry substrates, the alkali resistance of **ACRYLEX 400** make it an ideal choice for use under UNITED'S **Acryclad**, **Century 2000**, **Uni-Guard**, **Aquathon** and **Uni-Tex** systems.

ACRYLEX 400 is a single component, off-white, ready to use material available in 1-gallon (3.8 liter) cans and 5-gallon (19 liter) pails.

PHYSICAL PROPERTIES

1. **Solids by Weight:**
   46% (±1) [ASTM D2369]
2. **Solids by Volume:**
   36.2% (±1) [ASTM D2697]
3. **Weight per Gallon:**
   10.1 lbs (4.6 kg) (± 2) [ASTM D1475]
4. **Dry Time To Touch:**
   20 to 30 minutes @ 75°F (24°C), 50% R.H. [ASTM D1640]
5. **Cure Time for Recoating:**
   1 to 24 hours @ 75°F (24°C) [ASTM D1640]
   Topcoating time for water-base products is approximately 1 hour. Allow 24 hours prior to topcoating with solvent-based products.
6. **Volatile Organic Content (VOC):**
   87 grams/liter (calculated)
7. **Low & High Temperature Limits:**
   -30°F to 150°F (-34°C to 66°C)

ADVANTAGES

- **APPLICATION VERSATILITY: ACRYLEX 400** exhibits excellent adhesion over a wide variety of properly prepared surfaces including steel, aluminum, galvanized metal, new and weathered wood, previously painted surfaces, concrete, masonry and brick. Extended open time allows for shop priming.
- **NON-LIFTING:** Topcoats with strong solvents may be applied over cured **ACRYLEX 400** without lifting or bubbling the primer from the metal surface.
- **EXCELLENT FLEXIBILITY:** The high ratio of acrylic resins contained in **ACRYLEX 400** provide for maximum penetration and flexibility characteristics, as well as excellent cold temperature performance. It will not become brittle with age.
- **VOC COMPLIANT: ACRYLEX 400** is a water-based product and conforms to all local, state and federal environmental regulations and VOC requirements. Application and cleanup is easily accomplished using soap and water.

UNITED COATINGS®
LONGEVITY BY DESIGN®

SURFACE PREPARATION

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

All loosely adhering paint or coating shall be completely removed by scraping, pressure washing, blasting or other mechanical means. Any existing paint or coating, if not completely removed, shall be checked to verify that it is tightly adhered to the substrate. Prior to coating over any existing paint or coating, a test area must first be applied to verify compatibility and adhesion.

Glossy surfaces must by dulled by abrading the surface using brush blasting, sanding or other mechanical means. Chalky, oxidized or other contaminated surfaces must be washed with **United Cleaning Concentrate (UCC)** or equivalent biodegradable cleaner. Heavy deposits of dirt or contamination may require agitation with a stiff-bristle broom or similar mechanical scrubber.

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. Processing oils on new galvanized metal surfaces must be removed using a vinegar or muriatic acid solution as defined in SSPC-SP8 Pickling.

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.

WOOD SURFACES: Wood shall be free from dust, ridges and projections. All pits, gouges, knotholes and other depressions shall be filled and leveled using exterior grade wood putty. Degraded, deteriorated or unsound surfaces shall be repaired or replaced. **ACRYLEX 400** will provide tannin and stain-blocking qualities over wood substrates.

CONCRETE SURFACES: Concrete surfaces must be free from curing agents, form release agents, surface chemicals, sharp projections, ridges and loose aggregate. New concrete should be water-cured in lieu of using a curing compound. Restore any loose aggregate to a reasonable condition using **Uni-Crete** or similar polymer modified cement patching or resurfacing compound.

Sandblasting of concrete will be necessary if the surfaces are contaminated to the point that acid etching, chemical cleaning or power washing is not sufficient for removal. Concrete surfaces having a smooth, steel trowelled finish should be acid etched or sandblasted. **ACRYLEX 400** provides excellent alkali resistance over concrete and masonry substrates.

OTHER SURFACES: **ACRYLEX 400** adheres directly to most clean fiberglass and plastic surfaces. New or dense surfaces should be scuff-sanded prior to priming.

UNITED COATINGS®
LONGEVITY BY DESIGN®
19011 E. Cataldo Ave. • Spokane Valley, WA 99016
(509) 926-7143 • Fax: (509) 928-1116
(800) 541-4383 • www.unitedcoatings.com

APPLICATION

ACRYLEX 400 may be applied by brush, conventional or airless spray. Any airless spray capable of 1,000 psi (6,980 kPa) and ½ gallon per minute (1.9 l/minute) can be used. A reversible, self-cleaning spray tip with an orifice size of .015" to .021" (.38 to .53 mm) and minimum 40 degree fan angle is recommended. Before spraying, flush equipment with clean water to prevent contamination.

Coverage rate will vary depending upon the substrate, its surface profile and porosity. One coat is usually sufficient for priming most surfaces. The following chart should be used as a guideline only for determining approximate application rates:

Substrate	Coverage Rate
Galvanized Metal	300 ft²/gal (7.3 m²/l)
Steel	200 ft²/gal (4.9 m²/l)
Aluminum	300 ft²/gal (7.3 m²/l)
Smooth Concrete	250 ft²/gal (6.1 m²/l)
Standard Block	200 ft²/gal (4.9 m²/l)
Lightweight or Textured Block	150 ft²/gal (3.7 m²/l)
Wood	250-300 ft²/gal (6.1-7.3 m²/l)

When using **ACRYLEX 400** as a spot primer over previously coated surfaces, abrade the existing material to a feather edge so that the topcoat makes a smooth transition over the primed areas. Apply using multi-directional spray passes to assure positive coverage. On porous or textured surfaces requiring more than one coat, subsequent coats should be applied in a direction perpendicular to the previous coat after it has dried.

ACRYLEX 400 can be topcoated as soon as it is thoroughly dried, and should normally be topcoated within 48 hours of application. Surfaces that have become contaminated must be cleaned prior to topcoating. When used as a shop primer, the surfaces should be thoroughly washed with **UCC** or equal, and spot primed as necessary prior to topcoating.

Use water and **UCC** to thoroughly flush the equipment. Purge the water from the system using a mild solvent, leaving the solvent in the lines until next use.

LIMITATIONS & PRECAUTIONS

ACRYLEX 400 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 **ACRYLEX 400** at temperatures below 50°F (10°C), or when there is a possibility of temperatures falling below 32°F (0°C) within 2 hours of application.

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 400** Material Safety Data Sheet.