

CORCHEM[®] 274 URETHANE FINISH

- GENERIC** Proprietary advanced technology hexamethylene diisocyanate (timer ring) resin reacted with an acrylic/polyester polyol reinforced with non-toxic color stable and weather resistant pigments. The polymer structure is extremely UV (ultraviolet) and chemical resistant.
- DESCRIPTION** Attractive chemical resistant urethane finish designed to provide maximum gloss and color retentive appearance for substrates and surfaces that will be exposed to extremely corrosive environments. It has superior flexibility, toughness, and resistance to cold temperature, thermal shock, vibration, impact, and abrasion. The cured film (free of solvents) conforms to United States Department of Agriculture requirements for coatings in incidental contact with food.
- USE** Mechanical machinery, piping and processing equipment, railcars, tank trucks, storage reservoirs. Provides a high degree of protection against moisture, corrosive fumes and chemical contact. Intended for use in both field and shop operations. It may be used as a finish topcoat in combination with primers or intermediate coatings such as CORCHEM[®] 204, 235, 254, 260, 262, 283, MCTHANE™ 55, 150, NOVA™ 110, 113, 301 and many other CORCHEM[®] products.
- SERVICE LIMITATIONS** Temperature resistance up to 250°F (dry) depending upon the individual exposure. CONTACT CORCHEM[®] FOR SPECIFIC RECOMMENDATIONS BEFORE PROCEEDING for exposure to corrosive chemicals and elevated temperatures.
- COLORS** Various.
- FINISH** High Gloss. Finish may vary due to texture and porosity of substrate.
- CAUTION!** Chemical and physical resistance, color and gloss retention, solids content and application properties may vary according to color selected. Color and gloss variation may occur due to different induction and heat/dry time cure cycles used or if subject to moisture before curing is complete. Color and gloss retention will be affected by exposure to elevated temperatures. Some colors require a white base coat be applied prior to finish coating and/or multiple applications in order to achieve satisfactory hiding and uniformity of appearance.
- VOLUME SOLIDS** 72% (may vary depending on color selected).
- DRY COVERAGE** Theoretical (no loss): 1152 sq. ft. per gallon for one mil (.001). When computing coverage allow for application loss and surface irregularities.
- DRY FILM THICKNESS** 2.0 to 5.0 mils per coat. Multiple applications are recommended and may be necessary to achieve the specified or desired film thickness or due to variations in design configurations, application equipment, temperature and other factors.

COMPONENTS Two. By volume 4 to 1 (Base:Activator).

POT LIFE 2 hours @ 70°F (mixed one-gallon kit). Pot life is significantly shorter for higher temperatures or larger quantities and longer for lower temperatures or smaller quantities.

VOC CONTENT <250 gms/l or <2.1 lbs/gal (may vary depending on color). Conforms to United States National Volatile Organic Compound Emissions Standards.

THINNER CORCHEM® 8 & 30. Thin only as required for proper application. Do not exceed applicable volatile organic compound (VOC) regulations. Thinner added:

05% - 276 gms/lit or 2.30 lbs/gal	10% - 302 gms/lit or 2.52 lbs/gal
15% - 326 gms/lit or 2.72 lbs/gal	20% - 348 gms/lit or 2.90 lbs/gal

APPLICATION METHODS Air or airless spray, roller, brush (small areas).

TEMPERATURES Apply at 35°F to 125°F (Air and Surfaces) and 5°F above the dew point. Sudden and/or substantial temperature change during curing process can cause film defects.

CURING TIME Recoat 8 hours @ 70°F (perform spot adhesion test and refer to RECOAT AND REPAIR Section if coating reaches complete cure and hardness or if subjected to extended exposure to sunlight). Final cure is 3 days @ 70°F. Curing times are significantly shorter for higher temperatures or lower thickness and longer for lower temperatures or higher thickness. Curing times are affected by the method of application; the quantity of thinner used; the amount of ventilation and air circulation; relative humidity; etc.

NOTICE! For fast curing and lower temperature applications the use of CORCHEM® 32 ACCELERATOR may be desired. Contact CORCHEM® for instructions and cure times.

PACKAGING 1-gallon & 5-gallon premeasured kits.

SHELF LIFE 1 year from shipment date protected between 40°F and 100°F.

DOT/FLASH POINT Flammable Liquid Classification.

PERFORMANCE DATA Contact CORCHEM® for desired information.

SURFACE PREPARATION Round off sharp edges and rough welds. Burrs and weld spatter should be completely removed. Surfaces must be clean, dry and free of any dirt, chalk, grease, oils, salts, and deleterious materials before application is performed. Vacuum the topside of all horizontal and sloped surfaces.

CARBON STEEL Severe Exposures: SSPC-SP-10 (Near-White Blast Cleaning). Mild Exposures: SSPC-SP-6 (Commercial Blast Cleaning). Metal surfaces should have an anchor profile of two mils (.002) or more. Apply suitable CORCHEM® primer or coating before applying this product.

NON-FERROUS METALS SSPC-SP-7 (Brush-Off Blast Cleaning). Coatings applied to these surfaces may not achieve the same degree of adhesion and toughness. Apply suitable CORCHEM® primer or coating before applying this product.

WELDING Welding should precede coating. If already coated, follow instructions in U.S.A. Standard Z49.1 Safety in Welding and Cutting.

CONCRETE AND MASONRY	Concrete and masonry to cure at least 28 days. Surface and substrate must be dry. Clean surfaces by abrasive "brush-off" blast. Level protrusions and repair cavities, voids, and cracks. Apply a suitable CORCHEM® primer or coating and back roll to <u>completely wet and thoroughly penetrate surface</u> to ensure that all irregularities are filled and sealed before applying this product as a finish topcoat.
EXISTING COATINGS	Surfaces must be clean, dry and free of any dirt, chalk, grease, oils, salts, and deleterious materials before application is performed. <u>Perform a test patch to check adhesion and compatibility.</u> If necessary abrade the surface sufficiently to provide a profile adequate to insure a mechanical bond. The use of CORCHEM® 11 ADHESION PROMOTER may be desired.
APPLICATION MIXING	Flush clean all equipment with CORCHEM® 8 or 30 THINNER. Add Component A into Component B. Do not vary proportions. Power stir, until completely mixed and continue agitation during application. Strain only if required for proper application. <u>Do not allow catalyzed material to stand in equipment after use!</u> Clean immediately with CORCHEM® 8 THINNER or Methyl Ethyl Ketone (MEK).
APPLY	In an even wet coat. Ensure seams and irregularities are completely covered. Application below minimum or above maximum suggested dry film thickness ranges may adversely affect performance. Use of a thin or "mist" coat prior to regular application may be needed to reduce pinholing and/or blistering over a rough/porous type primer or substrate.
RECOAT AND REPAIR	If material has reached complete cure and hardness, or if subjected to extended exposure to sunlight, uniformly abrade the surface and feather the edges. The surface must be roughened sufficiently to provide a profile adequate to ensure a mechanical bond. The use of CORCHEM® 11 ADHESION PROMOTER may be desired.
INSPECTION	Check for desired dry film thickness and for pinholes, holidays, bare areas, etc. before placing in operating service.
AIRLESS SPRAY	Graco or equal. Pump ratio 30:1 or higher, 206-718 gun with fluid tip of .017" or larger orifice size with Reverse-A-Clean tip, 3/8" I.D. or larger high-pressure solvent resistant fluid line, 1/2" I.D. or larger air supply line. Continuous air source capable of 80 to 100 psi inbound pressure at pump.
CONVENTIONAL SPRAY	Binks or equal. Pressure material pot with mechanical agitator, dual regulators, air-gages, and oil and moisture separators. No. 2001 gun (external mix), 66 fluid nozzle, 565 fluid needle, 63 PB air cap, heavy-duty fluid spring, Teflon fluid packing, 1/2" I.D. or larger high solvent resistant fluid line and 3/8" I.D. or larger air-supply line. Continuous air source capable of 20 cfm or more at 80 psi per nozzle and 60 psi to the pot.
GENERAL	Regulate pressure as required for proper application. Proportionally adjust pressure higher for smaller hose diameter and/or longer hose length and adjust pressure lower for larger hose diameter and/or shorter hose length. Select tip angles and orifice diameters according to application needs.
ROLLER	1/4 inch nap synthetic cover such as EZ Paint'r Pronel or equal.
BRUSH	Short hair or natural bristle.

CLOTHING Wear protective garments, shoes, goggles, and filter masks. Use protective barrier creams on exposed skin areas.

CONFINED SPACES Use explosion-proof lighting and electrical equipment, non-sparking tools, clothes and shoes. Ground all structures and equipment. Use procedures that prevent static electrical sparks. Wear properly fitted appropriate NIOSH/MSHA approved fresh air respirator such as MSA or equal with 1/4" I.D. or larger air supply line connected directly to proper air source during and after application unless air monitoring demonstrates vapor/mist levels are within safe limits. Use suction type exhaust fans and blowers with sufficient cfm capacity to keep solvent vapors below 20% of the explosive limit. **CAUTION!** Air circulation and exhausting of solvent vapors must be continued until the coatings have fully cured to insure that no potential for fire, explosion or health hazard remains.

SAFETY INFORMATION

THIS PRODUCT CONTAINS PETROLEUM DISTILLATES, ESTERS, ACRYLIC/POLYESTER AND ALIPHATIC POLYISOCYANATE RESINS. DO NOT USE IF YOU HAVE HAD A REACTION TO THESE MATERIALS.

WARNING! FLAMMABLE! VAPOR HARMFUL! CAUSES SEVERE EYE AND SKIN BURNS. MAY CAUSE SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. HARMFUL OR FATAL IF SWALLOWED!

Keep away from heat, sparks, and open flame. Use only with adequate ventilation. Prevent breathing of vapor or spray mists. Wear a properly fitted appropriate respirator during application and until all vapors and spray mists are gone. **DO NOT USE IF YOU HAVE CHRONIC LUNG OR BREATHING PROBLEMS.** Prevent contact with eyes and skin. Do not take internally. Keep closures tight and upright to prevent leakage. Keep container closed when not in use. In case of spillage, absorb and dispose of in accordance with local applicable regulations. **FIRST AID:** In case of skin contact, wash thoroughly with soap and water; for eyes, flush immediately with plenty of water for 15 minutes and call a physician. Remove and wash contaminated clothing before reuse. (Discard contaminated shoes). If inhaled, remove to fresh air. If breathing difficulty persists or occurs later, consult a physician and have label and MSDS information available. If swallowed, **CALL A PHYSICIAN IMMEDIATELY. DO NOT INDUCE VOMITING.**

IN CONFINED SPACES AND TANKS OBEY SPECIAL SAFETY AND EQUIPMENT INSTRUCTIONS!

FOR INDUSTRIAL USE BY PROFESSIONAL APPLICATORS ONLY. NOT INTENDED FOR SALE TO THE GENERAL PUBLIC. This product should not be sold or delivered to any person under 18 years of age. KEEP OUT OF THE REACH OF CHILDREN! IF, FOR ANY REASON, ADDITIONAL PRODUCT AND SAFETY INFORMATION, INSTRUCTIONS OR EXPLANATIONS ARE NEEDED, CONTACT CORCHEM® IMMEDIATELY!

LIMITED WARRANTY

WARRANTY & LIMITATION OF SELLER'S LIABILITY: CORCHEM® CORPORATION warrants only that its coatings represented herein meet the formulation standards of CORCHEM® CORPORATION.

THE ABOVE WARRANTY SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTIONS ON THE FACE HEREOF.

The buyer's sole and exclusive remedy against CORCHEM® CORPORATION shall be for replacement of the product in the event, a defective condition of the product should be found to exist. NO OTHER REMEDY (INCLUDING, BUT NOT LIMITED TO, INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE TO THE BUYER. The sole purpose of this exclusive remedy shall be to provide buyer with replacement of the product if any defect in materials is found to exist. This exclusive remedy shall not be deemed to have failed its essential purpose so long as CORCHEM® CORPORATION is willing and able to replace the defective materials.

Technical and application information is provided for the purpose of establishing a general profile of the coating and proper coating application procedures. Test performance results were obtained in a controlled environment and CORCHEM® CORPORATION makes no claim these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection and use of the coating.

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CONTACT YOUR CORCHEM® REPRESENTATIVE FOR CURRENT TECHNICAL DATA AND INSTRUCTIONS.

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