

# TECHNICAL DATA SHEET

# 144 LL

Water-Based Hybrid Urethane Coating

# DESCRIPTION

**144 LL** is a zero VOC, water-clear, two-component, waterborne aliphatic polyaspartic polyurethane. This unique non-yellowing coating produces an exceptionally hard finish with high-level abrasion and very good stain resistance. 144 LL remains non-chalking, has superior UV resistance, provides excellent long-lasting protection from many chemicals, and offers superior wear through durability while producing no strong odors during application or curing.

#### USES

144 LL is an ideal protective finish coat for standard and decorative floor and wall systems. Its excellent durability and abrasion resistance makes 144 LL a perfect finish coat across industries such as pharmaceutical, healthcare, warehousing and manufacturing. This waterborne product is easy to apply, environmentally safe and meets all USDA/FDA guidelines for installation in federally inspected facilities.

## COVERAGE

144 LL is typically applied between 5-6 mils WFT.

### FEATURES

- Superior UV resistance
- High coverage rate
- Excellent scratch and abrasion resistance
- Easy application as floor or wall coating
- Exceptional adhesion
- High light reflectivity
- VOC compliant with virtually no odor
- May be thinned up to 15% with clean water

#### PACKAGING

1-gallon units

#### **TYPICAL PROPERTIES**

Volume Mix Ratio Viscosity (Mixed) Solids Content (%) Pencil Hardness VOC Application Temps Gel Time Dry to Touch (recoat with compatible products) Through Cure Open for Light Traffic/Use Shelf Life Mix entire batches and do not split kits 280 – 350 CPS Typical 51% (ASTM D-2697) 2H Zero (EPA method 24) 60° - 85°F 35 minutes @ 75°F 1-2 hours (min) @ 75°F 2-4 hours @ 75°F 24 hours (min) @ 75°F 6 months in unopened containers



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### LIMITATIONS FOR BEST RESULTS:

- Do not apply when Humidity exceeds 70% or when the substrate temperature is 5°F above dew point and falling.
- Allow each coat to dry to completely prior to re-coat.
- If applying a 2nd coat, the first coat of 144 LL must be lightly sanded to promote inter-coat adhesion and the 2nd coat must be applied within 24 hours of completing the previous coat.
- May be applied directly to dry, prepared concrete, but an appropriate Tri-Chem primer or base system is recommended.
- Do not apply this product heavier / thicker than the recommended spread rate / mil thickness or foaming or discoloration may occur.
- Do not split kits full unit mixing is very critical to product performance.
- Do not entrain air when mixing or applying.
- Thinning with up to 15% clean water is recommended when applying to floors

#### **PRODUCT APPLICATION**

Apply via dip and roll using a 5/16" microfiber roller. Vertical applications may be made via airless sprayer and back rolling (contact Tri-Chem for more information on spray applications). Tri-Chem product test data is based on temperatures of 75°F. Viscosity and working time are affected by temperatures— always consider the ambient, surface, and product temperature at the time and place of installation.

## **COLOR AND TEXTURES**

144 LL is manufactured in clear and white tint bases. It is not recommended for tinting with colorants, but may be factory tinted (30-gallon minimum order quantity and additional lead time required). Most Tri-Chem products are available in a wide range of textures using an appropriate broadcast aggregate, but aggregate larger than 240 mesh may not remain in 144 LL under use. Approximately 1.42 pounds of Tri-Chem's 240 grit Aluminum Oxide powder may be added into 1 gallon of 144 LL at the time of mixing to increase abrasion resistance and the cured coating's coefficient of friction. Adding AO powder will leave a superfine grain texture in the finish and will reduce light reflectivity. Repeated stirring the product during application to avoid the AO settling and then careful and even application is needed to avoid roller marks when AO powder has been added.

#### **PRODUCT STORAGE**

DO NOT allow Tri-Chem products to freeze. All Tri-Chem products should be properly stored above the floor on pallets or shelves, and in an area that has a constant minimum temperature of 50°F.

#### SURFACE PREPARATION

Always apply Tri-Chem products to a clean/sound substrate that is free of laitance, grease, oils, debris, and curing compounds. Concrete substrates should be cured for a minimum of 28 days prior to application of product [except as otherwise noted on the individual Product Data Sheet]. Whenever possible, remove existing coatings and/or flooring systems completely; if complete removal is not possible always perform tests to determine adhesion and compatibility to the existing flooring. Mechanical preparation by means of a diamond grinder or shot-blasting machine to a minimum CSP-2 profile followed by application of an appropriate Tri-Chem primer or base system is the best and recommended installation method for 144 LL applications, but this coating may be applied directly to prepared, dry concrete. If the substrate is not properly prepared and the appropriate profile is not achieved, failure of the product to adhere to the substrate may occur.



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#### **CHEMICAL RESISTANCE**

Always refer to Tri-Chem's chemical resistant chart for specific information on each product/system or contact Tri-Chem directly.

#### **CLEAN UP**

Application tools and equipment can be cleaned with soap and water immediately after use or with solvent once the product has begun to cure.

#### DISPOSAL

Product containers will contain product residue and must be disposed of properly. Label warnings must be observed at all times. All containers must be disposed in accordance with federal, state, and local regulations.

### **IMPORTANT NOTICE**

Always read and acquaint yourself with Tri-Chem's Technical Data Sheet, SDS (safety data sheet), and product labels for each individual product prior to mixing and prior to use. For further assistance, product questions, additional information and/or unexpected or unusual installation conditions— contact your local representative or Tri-Chem directly for recommendations. Kit components are pre-measured for optimal performance. Catalyzation errors due to incorrect mixing in the field voids product warranty.

#### WARRANTY

Information about Tri-Chem products is given, to the best of our knowledge, based on tests and experience. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you make your own tests to determine suitability of the product for the particular purpose. As products are often applied or used under conditions beyond our control, Tri-Chem cannot guarantee anything except the quality of its products. Tri-Chem warrants that the products meet the specifications set forth by Tri-Chem, but we reserve the right to change any given specification prior to notice. Tri-Chem DISCLAIMS ALL WARRANTIES RELATING TO THE PRODUCTS AND THEIR APPLICATION, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Receipt of a Tri-Chem product constitutes acceptance of the terms of this limited warranty and the terms and conditions set out in our invoice, contrary provisions of buyer's purchase documents notwithstanding. Upon receipt of the merchandise, purchaser has 30 days to notify Tri-Chem, in writing, that materials are defective. In the event Tri-Chem finds that the product delivered is off specification, Tri-Chem will, at its sole discretion, either replace the product(s) or refund the purchase price thereof, and Tri-Chem's choice of one of these remedies is the buyer's sole remedy. In no event shall the liability of Tri-Chem exceed the purchase price of shipped merchandise. Claims must be in writing. Claims after 30 days are void. Tri-Chem will, under no circumstances, be liable for special, incidental, or consequential damages. This warranty supersedes all other guaranties, whether oral or written, and whether expressed, implied, or statutory. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Certain products may contain chemicals that may cause serious physical injury. Before using, please read the Safety Data Sheet and follow all precautions to prevent bodily harm.