

DESCRIPTION

CANTOL357 CRYSTAL CLEAR II is a one component moisture cured polyurethane (HDI based) floor coating/sealer that exhibits superior characteristics for abrasion resistance and chemical resistance. This product has good UV stability. It's recommended for showrooms, warehouses, laboratories, cafeterias, and most indoor chemical exposure areas with regard to concrete or cement.

FEATURES

- One Component
- Moisture Cured polyurethane
- Superior Characteristics for Abrasion Resistance
- Superior Characteristics for Chemical Resistance

DIRECTIONS

PRODUCT STORAGE:

- Store product in an area so as to bring the material to normal room temperature before using.
- Continuous storage should be between 60 and 90° F.

SURFACE PREPARATION:

- Surface preparation will vary according to the type of complete system to be applied.
- For a one or two coat thin build system (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved.
- For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4'x4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding.

PRODUCT MIXING:

- This product is a one component product. Before using stir well. Avoid whipping air into the coating when stirring.

PRODUCT APPLICATION:

- The material can be applied by brush or roller.
- Be sure to thoroughly roll out the material in successive passes to make sure the substrate is well wetted out. Read the MSDS before using.
- Maintain temperatures within the recommended ranges during the application and curing process.
- Properly prime the substrate. Too thick of an application or application to a damp surface may cause product failure. When using a primer other than those listed on the front of this technical data sheet, apply a test patch before overcoating the primer to determine suitability and compatibility.

RECOAT OR TOPCOATING:

- Multiple coats of this product are acceptable.
- If you opt to recoat this product, you must first be sure that all of the solvents have evaporated from the coating during the curing process.
- The information gives reliable guidelines to follow. However, it is best to test the coating before recoating or topcoating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the recoat can be started. Always remember that colder temperatures will require more cure time for the product before recoating can commence.
- Before recoating or topcoating, check the coating to insure no contaminants exist such as an epoxy blush.
- If necessary, clean the surface prior to recoating with a standard type detergent cleaner.
- When recoating this product with subsequent coats of the urethane, it is advisable to apply the recoat before 24 hours passes. Also, it is advisable to degloss the previous coat to insure a trouble free bond, if more than 24 hours has elapsed since the previous coat.

CLEANUP:

Use ketone solvents.

FLOOR CLEANING:

Caution! Some cleaners may affect the colour of the floor installed. Test each cleaner in a small area. Best to use Cantol EF-90. If no ill effects are noted, you can continue to clean with the product and process tested.

RESTRICTIONS:

Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle.

APPLICATIONS

Recommended for priming with broadcasting as a crack bridging sealer before application of epoxy mortar or topcoats.

TECHNICAL DATA

Solids by weight: 65% (+/- 3%)

Solids by volume: 60% (+/- 3%)

Volatile organic content: 2.80 pounds per gallon

Colors available: Clear (gardner 1)

Recommended thickness: 2-4 mils per coat wet thickness

Coverage per gallon: 400 to 800 square feet @ 2-4 mils wet thickness

Packaging information: 1 gallon, 5 gallon and 55 gallon containers (volumes approximate.)

Mix ratio: One component product

Shelf life: 3 months in unopened containers

Finish characteristics: High gloss (>70 at 60 degrees @ Erichsen glossmeter)

Abrasion resistance: Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 4.4 mg loss

Viscosity: Less than 200 cps (typical)

PRODUCT DATA

CANTOL 357 CRYSTAL CLEAR II Moisture Cured Urethane

DOT CLASSIFICATIONS: "FLAMMABLE LIQUID N.O.S, 3, UN1993, PGIII"

Flexibility: No cracks on a 1/8" mandrel

Impact resistance: Gardner Impact, direct & reverse = 100 in. lb. (passed)

Adhesion: 360 psi @ elcometer (concrete failure, no delamination) (applied over epoxy clear primer)

Hardness: 2H

CURE SCHEDULE: (70°) (21.11°C):

Pot Life – (1 Gallon Volume) ... 3- 5 Hours

Tack Free (Dry To Touch) 4-7 Hours

Recoat Or Topcoat 9-13 Hours

Light Foot Traffic..... 13-24 Hours

Full Cure (Heavy Traffic)3-5 Days

APPLICATION TEMPERATURE:

60-90°F (15-32°C) with relative humidity between 60-90%.

CHEMICAL RESISTANCE:

REAGENT	RATING
Acetic Acid 5%	C
Xylene	E
MEK	B
Methyl Alcohol	B
Gasoline	D
10% Sodium Hydroxide	E
50% Sodium Hydroxide	D
10% Sulfuric	D
10% Hydrochloric Acid	D
20% Nitric Acid	C
Ethylene Glycol	D

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. **NOTE:** Extensive chemical resistance information is available through your sales representative.

PRIMER:

Cantol Epoxy Primer - Clear

TOPCOAT:

None recommended.

LIMITATIONS:

- Clarity of colour may be affected by high humidity, low temperatures, chemical exposure or exposure to lighting such as sodium vapour lights.
- For best results use a high quality 3/8" nap roller.
- Slab on grade requires moisture barrier.
- Substrate temperature must be 5°F above dew point.
- All new concrete must be cured for at least 30 days.
- Use a suitable primer
- If recoating after 24 hours, then the surface must be deglossed before the application.
- The concrete and joints must be thoroughly dry prior to application.
- Applying the product thicker than recommended may result in product failure.
- Physical properties are typical values and not specifications.

PRECAUTIONS

WARNING: Causes irritation. Avoid contact with skin and eyes. Use with adequate ventilation. Wear goggles when using. Wear gloves impervious to chemicals. Wash thoroughly after handling. Keep away from heat, sparks and open flame. Close container after each use. May cause skin sensitization.

KEEP OUT OF THE REACH OF CHILDREN. FIRST AID: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek prompt medical attention. Flush skin with soap and water. For extreme exposure use a safety shower immediately. Wash affected area with soap and water and remove all contaminated clothing promptly. If ingested, do not induce vomiting, keep person warm and consult a physician immediately. Give 1-2 cups of milk or water to drink. Call a physician. Inhalation: remove victim to fresh air and administer oxygen if necessary. Obtain medical assistance. Asthmatic type symptoms may occur immediately or be delayed for several hours. Treatment is symptomatic. For industrial and institutional use only. See Material Safety Data Sheet (MSDS) for more complete information.

GUARANTEE

Cantol guarantees its products, when used as directed, to do all it claims. Should the product fail to demonstrate our claims, the remaining material may be returned to us and no charge will be made.