



EUCLID CHEMICAL

# DURAL EPOXY PRIMER

100% SOLIDS EPOXY PRIMER FOR EPOXY AND URETHANE COATING SYSTEMS

## DESCRIPTION

**DURAL EPOXY PRIMER** is a two-component, 100% solids, penetrating epoxy primer. It is recommended for use as a primer with various Euclid Chemical water-based epoxies, 100% solids epoxies, and urethane coatings.

## PRIMARY APPLICATIONS

- Schools
- Laboratories
- Clean rooms
- Warehouses
- Hospitals

## FEATURES/BENEFITS

- Fast drying
- Non-flammable
- Low odor
- Low VOC

## TECHNICAL INFORMATION

The following are typical values obtained under laboratory conditions. Expect reasonable variation under field conditions.

**Material Properties @75°F (24°C) and 50% RH**

<b>Mix ratio</b> (A:B by vol)	1:1
<b>VOC Content</b>	≤ 5 g/L
<b>Mixed viscosity</b> , cps	300 to 400
<b>Gel time</b> (100 gms.), mins	30 to 40
<b>Pot life</b> , 2 gal. (7.6L) mins	10 to 20
<b>Mixed solids</b> % by wt	100
<b>Tack free time</b> , hrs	3 to 4

Values presented are typical and not necessarily referenced to create specifications.

## PACKAGING

DURAL EPOXY PRIMER is available in 4 gal (15.1 L) cases that contain two 2 gal (7.6 L) kits. It is also available in 10 gal (37.9 L) units.

## SHELF LIFE

2 years in original, unopened containers

## COVERAGE

200 to 250 ft<sup>2</sup>/gal (4.9 to 6.1 m<sup>2</sup>/L)

**Note:** Coverage rates are approximate. Actual coverage depends on temperature, texture, and substrate porosity.

## DIRECTIONS FOR USE

**Surface Preparation:** The surface must be structurally sound, clean and free of grease, oil, curing compounds, soil, dust and other contaminants. See note in "Precautions/Limitations" section if coating is to be placed over old/existing epoxy or urethane coatings. New concrete and masonry must be at least 28 days old. Surface laitance must be removed. Concrete surfaces must be roughened and made absorptive, preferably by mechanical means, and then thoroughly cleaned of all dust and debris. If the surface was prepared by chemical means (acid etching), a water/baking soda or water/ammonia mixture, followed by a clean water rinse, must be used for cleaning, in order to neutralize the substrate. The Concrete Surface Profile (CSP) should be equal to CSP 2-5 in accordance with Guideline 310.2R-2013, published by the International Concrete Repair Institute (ICRI). Allow substrate to dry before coating application. Following surface preparation, the strength of the surface can be tested if quantitative results are required by project specifications. An elcometer or similar tensile pull tester may be used in accordance with ASTM C1583, and the tensile pull-off strength should be at least 250 psi (1.7 MPa).

Do not apply epoxy or urethane coatings if there is excessive moisture in the concrete, or if the moisture vapor emission rate (MVER) is high. Before application of DURAL EPOXY PRIMER, perform either of these tests: **ASTM F2170** - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using In-Situ Probes, or **ASTM F1869** - Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. If the relative humidity is 70% or greater, or the MVER is 3 lbs/1000 ft<sup>2</sup>/24 hrs or greater, use a moisture mitigation system such as Dural Aquatight WB instead of DURAL EPOXY PRIMER. After surface preparation and moisture testing, a test section application is recommended to confirm good adhesion and compatibility of the coating with the surface, and to confirm appearance and aesthetics.

When coating steel, all contamination should be removed and the steel surface prepared to a “near white” finish (SSPC SP10) using clean, dry blasting media.

**Mixing:** Mix DURAL EPOXY PRIMER using a low-speed drill and a mixing paddle. Pre-mix Part A and Part B separately for approximately 1 minute each. Combine Part A and Part B in a 1 to 1 ratio by volume, then mix thoroughly for 3 to 5 minutes. Scrape the bottom and sides of the containers at least once during mixing. Do not scrape bottom or sides of the container once mixing operations have ceased; doing so may result in unmixed resin or hardener being applied to the substrate. Unmixed resin or hardener will not cure properly. Do not aerate the material during mixing. To keep aeration to a minimum, the recommended mixing paddles are #P1 or #P2 as found in ICRI Guideline 320.5R-2014.

**Application:** DURAL EPOXY PRIMER can be applied using a short nap roller, magic trowel/squeegee, brush, or an airless spray. Subsequent epoxy or urethane coatings may be applied as soon as the DURAL EPOXY PRIMER has become tack free (typically 3 to 4 hours at 75°F (24°C)), but no later than 24 hours after primer application. If more than 24 hours passes between applications, lightly sand the primer, then perform a solvent wipe over the area using acetone. Allow the acetone to fully evaporate before applying the subsequent coating.

## CLEAN-UP

Clean tools and application equipment immediately with acetone, xylene, or MEK. Clean spills or drips with the same solvents while still wet. Hardened DURAL EPOXY PRIMER will require mechanical abrasion for removal.

## PRECAUTIONS/LIMITATIONS

- Store DURAL EPOXY PRIMER indoors, protected from moisture, at temperatures between 50°F and 90°F (10°C and 32°C)
- Surface and ambient temperature during coating applications should be between 50°F and 90°F (10°C and 32°C)
- Material temperatures should be at least 50°F (10°C) and rising
- Do not apply DURAL EPOXY PRIMER if surface temperature is within 5°F (3°C) of the dew point in the work area
- Working time and cure time will decrease as the temperature increases, and will increase as the temperature decreases
- Do not thin DURAL EPOXY PRIMER
- When a vapor barrier is utilized in on-grade applications of DURAL EPOXY PRIMER, it must be installed directly under the slab
- Depending on the condition of the substrate, minor surface defects can appear in the coating when applied. Proper surface prep, patching of substrate imperfections, and priming will ensure a better overall finish.
- If coating over old/existing epoxy or urethane coatings, or if more than 24 hours elapses between coats: sand the previous coat, wipe clean, and proceed with coating operations. If old/existing coatings are peeling, flaking, etc., all unsound material must be removed prior to new coating applications.
- Application of a test area is recommended to confirm final appearance and texture of the system with the end user
- DURAL EPOXY PRIMER is not to be used as a finished/aesthetic coating
- DURAL EPOXY PRIMER may have a yellow cast to the film if applied at higher film builds
- Concrete surfaces may darken and give a “wet look” effect after application
- In all cases, consult the product Safety Data Sheet before use

Rev. 01.19

**WARRANTY:** The Euclid Chemical Company (“Euclid”) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Euclid, no other representations or statements made by Euclid or its representatives, in writing or orally, shall alter this warranty. EUCLID MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Euclid product fails to conform with this warranty, Euclid will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Euclid does not authorize anyone on its behalf to make any written or oral statements which in any way alter Euclid’s installation information or instructions in its product literature or on its packaging labels. Any installation of Euclid products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Euclid’s products for the Buyer’s intended purposes.