



# DURALKOTE 240

## HIGH BUILD FLEXIBLE EPOXY COATING

**EUCLID CHEMICAL**

### DESCRIPTION

**DURALKOTE 240** is a two-component, 100% solids, high performance epoxy coating system designed for use on concrete floors and walls. **DURALKOTE 240** is flexible, offers exceptional chemical and abrasion resistance, and provides excellent adhesion to properly prepared surfaces. **DURALKOTE 240** produces a glossy, tile-like, easily maintained surface. **DURALKOTE 240** is available in a Grey colour.

### PRIMARY APPLICATIONS

- Showrooms
- Mechanical rooms
- Truck/auto bay areas
- Warehouse floors
- Chemical processing and manufacturing plants
- Water treatment facilities
- Food service plants

### FEATURES / BENEFITS

- High build
- Chemical resistance
- Glossy, tile-like finish

### TECHNICAL INFORMATION

#### Material Properties @ 24°C

<b>Mixing Ratio</b> (A:B, by volume)	1:1
<b>Viscosity Mixed</b> cp	3,000 to 5,000
<b>Pot Life</b> full unit, minutes	15 to 25
<b>Gel Time</b> (100g Sample), minutes	30 to 40

<b>Tack Free Time</b> 15 mils, hours	4 to 6
<b>Hardness</b> ASTM D 2240, Shore D	75 to 85
<b>Tensile Strength</b> ASTM D 638, MPa	12.4 to 13.8
<b>Tensile Elongation</b> ASTM D 638, % at break	15 to 25

#### Chemical Resistance Data

##### ACIDS

Acetic	10%	3D
Chromic	10%	2D
Citric	10%	3D
Formic	25%	1
Hydrochloric	10%	2D
Lactic	85%	2D
Nitric	10%	3D
Phosphoric	10%	3
	85%	NR
Sulfuric Acid	10%	3D
	50%	3D
	98%	NR
Hydrofluoric	10%	2D

##### SOLVENTS

Ethyl Alcohol	95%	1
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Ethyl Acetate	NR
Methanol	1
Methyl Ethyl Ketone	NR
Mineral Spirits	4
Methylene Chloride	NR
Toluene	1
Xylene	1
Trichloroethane	2

##### ALKALIES/SALTS

Ammonia	29%	4
Potassium Hydroxide	50%	4
Sodium Hydroxide	50%	4
Detergent Solution		4
Ammonium Sulfate	50%	4
Sodium Chloride	50%	4
Ferric Chloride	50%	3D
Sodium Hypochlorite	10%	3D
Hydrogen Peroxide	35%	3D

#### MISCELLANEOUS

Brake Fluid	3	
Skydrol	3	
Formaldehyde	37%	3
Ethylene Glycol	4	
Propylene Glycol	3	
Vegetable Oil	4	
Gasoline	2	
Water	4	
Anti Freeze	4	
Bleach	4	

1 = Incidental (8 hrs)  
 2 = Splash & spill (72 hrs)  
 3 = Extended exposure (7 days)  
 4 = Long term exposure (30 days)  
 D = Discoloration  
 NR = Not rated

### PACKAGING

**DURALKOTE 420** is packaged in a 20L set. The mix ratio is 1:1 by volume.

### SHELF LIFE

2 years in original, unopened, properly stored package.

## COVERAGE

Neat Coating	m <sup>2</sup> /L
Duralkote 240, 1st Coat	2.5 to 3.7
Duralkote 240, 2nd Coat	2.5 to 3.7

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

## DIRECTIONS FOR USE

**Surface Preparation:** 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 for cleaning, in order to neutralise the substrate. The Concrete Surface Profile (CSP) should be equal to CSP 2-4. 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 D 4541, and the tensile pull-off strength should be at least 1.7 MPa.

Before application of Duralkote 240, ensure the concrete substrate should be dry to 75% RH as per BS8204 and free from rising damp and ground water pressure. Do not apply Duralkote 240 if there is excessive moisture present. After surface preparation, a test section application of the coating system is recommended to confirm good adhesion and compatibility of the coating with the surface, and also to confirm appearance and aesthetics.

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

**Mixing:** Mix **DURALKOTE 240** using a low-speed drill and a mixing paddle. Pre-mix Part A and Part B separately for approximately 3 minutes 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.

**Application:** See the “Epoxy & Urethane Coatings Application Guide” for installation means and methods.

Note that any coverage rates or mixing ratios for epoxy or epoxy-aggregate combinations found in the “Epoxy & Urethane Coatings Application Guide” are approximations, and are for general reference only. For product specific coverage rates and mixing ratios, refer to this technical data sheet.

Where an anti-skid surface is desired for **DURALKOTE 240**, broadcast approximately 1.2 to 2.4 kg/ m<sup>2</sup> of clean, dry aggregate into the first coat. When the first coat has cured, sweep off excess aggregate. Proceed with the second coat of **DURALKOTE 240**.

## 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 **DURALKOTE 240** will require mechanical abrasion for removal.

## PRECAUTIONS / LIMITATIONS

- Store **DURALKOTE 240** indoors, protected from moisture, at temperatures between 10°C and 32°C
- Surface and ambient temperature during coating applications should be between 10°C and 32°C
- Material temperatures should be at least 10°C and rising
- Do not apply **DURALKOTE 240** if surface temperature is within 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 **DURALKOTE 240**
- Do not apply **DURALKOTE 240** to slabs on grade unless an uninterrupted vapour barrier has been installed under the slab
- Do not apply **DURALKOTE 240** if the substrate is subject to excessive moisture vapour drive or hydrostatic pressure
- Although **DURALKOTE 240** is chemically resistant, surface staining of the coating may occur after contact with some chemicals.
- 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
- In all cases, consult the product Safety Data Sheet before use

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