TECHNICAL DATA SHEET

DURALKOTE® 240

High Build Flexible Epoxy Coating

1. **DESCRIPTION:** DURALKOTE 240 is a two component, 100% solids epoxy based system designed for use as a wall and floor coating. DURALKOTE 240 is flexible, yet offers excellent chemical and abrasion resistance, and has excellent adhesion to properly prepared surfaces. DURALKOTE 240 produces a flexible, tile-like, easily maintained surface. DURALKOTE 240 complies with the requirements of ANSI/NSF Standard 61 for use on potable water tanks.

2. **USES**: DURALKOTE 240 is used as a high performance maintenance coating with superior aesthetic benefits for applications in showrooms, clean rooms, laboratories, warehouse floors and many applications in chemical process and manufacturing plants. DURALKOTE 240 is ideal for use in truck/auto bay areas, food service plants, water treatment plants, breweries and all areas where easy clean up is essential.

3. **COMPOSITION AND MATERIALS**:DURALKOTE 240 is a two component, moisture insensitive, 100% solids epoxy system.

MATERIAL PROPERTIES AT 75°F

Mixing ratio (A:B, by volume)	1:1
Viscosity mixed, cps	3000-5000
Gel Time (100 gm sample)	30-40 mins
Pot Life (2 gallon unit)	15-25 mins
Tack free time (15 mils @ 75°F)	4-6 hrs
Tensile Strength, psi ASTM D638	1800-2000
Tensile Elongation, % at break ASTM D638	15-25
Compressive Strength, psi ASTM D695	4500-5500
Compressive Strength, psi (3 part sand), ASTM C-109	7000-8000
Hardness, Shore D, ASTM D2240	75-85
Water Gain 7 days %, max	0.5
Chemical Resistance: Refer to chemical resistance chart	

4. **COLORS:** DURALKOTE 240 is available in Light Gray, Dark Gray and Tile Red as standard colors. Special or custom colors are available subject to minimum quantity requirements.

5. **SURFACE PREPARATION:** Concrete must be structurally sound, dry, free of grease, oils, coatings, dust, curing compounds and other contaminants. Surface laitance must be removed. The preferred method of surface preparation is abrasive blasting or shotblasting. For oil contaminated surfaces using steam cleaning in conjunction with strong emulsifying detergent may be considered. Rinse thoroughly with potable water. After cleaning, remove defective concrete, honeycombs, cavities, joint crack voids and other defects by routing to sound material. Smooth, precast and formed concrete surfaces must be cleaned, roughened and made absorptive by abrasive blasting or shotblasting. If it is not possible to abrasive blast or shotblast, acid etch with a 15% Hydrochloric acid solution. After etching, pressure wash or flush the surface with copious amounts of water to neutralize the surface. Care must be taken to ensure that all salts and residue from the reaction have been removed. The pH of the surface should be checked, as per ASTM D4262, following acid etching. Following surface preparation, the cleaned surface should pull concrete when tested with an Elcometer or similar pull tester (ASTM D4541). Before application of the coating, use the "Visqueen test'' (ASTM D4263) to evaluate moisture level in concrete.
New Concrete: Should be allowed to cure for a minimum of 28 days. (Consult TAMMS Technical Service if earlier times are required). Remove any surface hardener or curing compounds, by using the recommended mechanical methods for surface preparation. Prepare surfaces as recommended above.
Old Concrete: For quick, small patching use suitable epoxy mortar; for larger areas, use cementitious patching materials which are compatible with the system. After patching, a light brush blast is recommended prior to coating. (Consult TAMMS Technical Service for appropriate patching materials).
Steel: All oils, greases, dirt, old coatings or chemical contaminates must be removed. All welds should be continuous and ground to remove all splatter, sharp edges, laps and other surface irregularities. All steel surfaces should be blasted to a "NEAR WHITE'' metal finish using clean dry blasting media.

6. **MIXING INSTRUCTIONS:** Premix DURALKOTE 240 Part A and Part B separately. Combine equal parts by volume of Part A (Base) and Part B (Hardener) in a clean container. Mix thoroughly with a slow speed drill motor and "Jiffy'' Mixer for a minimum 3 minutes. Scrape the sides and bottom of the container (including the paddle of the mixer) during mixing. Mix only enough material that can be used within the working life. Do not aerate mix.

7. **APPLICATION INSTRUCTIONS:** Surface and ambient temperatures should be between 50-90°F. Apply properly mixed DURALKOTE 240 by brush, short nap roller, notched squeegee or spray to the properly prepared surface. Apply at a rate of 10-15 wet mils (100-150 square feet per gallon). Air bubbles and voids can be minimized by using a spiked roller immediately after application. Allow to cure a minimum of 5-6 hours at 75°F and no longer than 24 hours. Apply a second coat of DURALKOTE 240 at 10-15 wet mils (100-150 sq. ft. per gallon). In most cases, a penetrating low viscosity primer will minimize outgassing and help improve surface appearance of DURALKOTE 240. Where an **anti-skid surface** is desired, broadcast

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approx. 1/4-1/2 pound/sq. ft. of clean dry aggregate into the first coat. When first coat has cured, sweep off excess aggregate. Apply a sealer coat at a coverage rate of 100-150 sq. ft./gal.

8. **CONSTRUCTION DETAILS:** For floor terminations, wall/floor transition detail, trenches, etc., please refer to Construction Details guidelines.

9. **COVERAGE:** DURALKOTE 240 coverage rates are approximate, and for estimating purposes only. Surface temperature, porosity, and texture will determine actual material requirements.

	sq.ft./gal
Primer (Optional)	
Duraprime 50	125-250
or	
Duraltex Clear	150-300
Top Coating	
Duralkote 240 (2 coats recommended)	100-150 per coat

CHEMICAL RESISTANCE CHART

ACIDS	RATING
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
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	RATING
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 Soln	4

Key:

4 - Long term exposure (30 days),

3 - Extended Exposure (7 days),

2 - Splash/spill (72 hours),

1 - Incidental contact (8 hours),

D - Discoloration,

NR - Not Rated

Applicable for exposures at room temperature when applied at a minimum 30 mil thickness. This guide is intended as an aid in determining the potential usefulness of DURALKOTE 240 as a protective coating against chemical exposure. Each application or combination of chemicals should be evaluated according to its specific circumstances and conditions.

10. **CLEAN-UP INSTRUCTIONS:** Clean tools and application equipment immediately after use with methyl ethyl ketone or xylol. Clean spills or drips while still wet with solvent. Dried DURALKOTE 240 will require mechanical abrasion for removal.

11. **PACKAGING:** DURALKOTE 240 is available in 4 gallon cases. **Storage:** 50-90° F. Protect from moisture and freezing. **Shelf-Life:** Two years in original, unopened container, properly stored.

12. **CAUTIONS:** Do not apply to wet surfaces. Do not apply if humidity is greater than 90%. The surface temperature must be at least 5°F above the dew point of the work area. Do not thin the material. Do not apply if ambient or substrate temperature is below 50° F. Be sure work area is well ventilated. When applied directly to concrete, pinholes or bubbles may result due to concrete outgassing. Coating is a vapor barrier after cure. Variations in color may occur after extended UV exposure.

13. **ENVIRONMENTAL AND SAFETY:**
Industrial Use Only.
Component "A'': Contains epoxy resin. Vapors can cause respiratory irritation. Contact can cause skin and eye irritation. Can cause sensitization after prolonged or repeated exposure. Use of safety goggles and chemical resistant gloves is recommended. Use only with adequate ventilation.
Component "B'': IS CORROSIVE. Contains amines. Contact with eyes and skin may cause severe burns. Can cause sensitization after prolonged or repeated use. Use of safety goggles and chemical resistant gloves is highly recommended. Use only with adequate ventilation.
First Aid: In case of skin contact, wash immediately and thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. Consult physician immediately. For respiratory problems, remove person to fresh air.
Disposal: Collect with absorbent material. Dispose of in accordance with current local, state and federal regulations. READ MATERIAL SAFETY DATA SHEET BEFORE USING. FOR INDUSTRIAL USE ONLY. **KEEP AWAY FROM CHILDREN AND ANIMALS.**

EMERGENCY RESPONSE:
1-800-424-9300 (CHEMTREC)
1-800-862-2667 (TAMMS)

14. **TECHNICAL SERVICE:** For application procedures or surface conditions not specified above, please contact:

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