

# DeCara, Inc. Dynamis

# 1. PRODUCT NAME

**EPO PATCH AND GROUT** 

EPOXY CONCRETE
PATCH & GROUT
CONTAINS NO
SOLVENTS100% SOLIDS

# 2. MANUFACTURER

DeCara, Inc. dba Dynamis 415 East Venice Avenue Venice, Florida 34285

# 3. PRODUCT DESCRIPTION

**BASIC USES:** EPO Patch and Grout is an epoxy patching compound for the general patching of holes and worn areas in concrete. EPO Patch and Grout is supplied as a two-component kit, epoxy resin and hardener, and is mixed on the job with silica sand (sandblast grade) for patching and topping and with silica sand and washed pea gravel for deep grouting. EPO Patch and Grout is also available in a three-component kit form containing epoxy resin, hardener and a pre-measured amount of aggregate for convenience in handling and mixing.

EPO Patch and Grout can normally be installed over weekend shutdown periods, where required, and will cure ready for use overnight, reducing costly down time.

EPO Patch and Grout is used for patching structurally sound concrete floors in dairies, meat packing plants, beverage plants, paper processing plants and industrial areas where extreme corrosion and wear resistance are required.

**LIMITATIONS:** Surfaces which are to be patched or grouted must, a) be at least 50° F, b) be clean and dry, c) be structurally sound, and d) have adequate ventilation. **Keep product from freezing.** 

**COLORS:** Grey, tile red and neutral.

**APPLICABLE STANDARDS:** When repairing, coating or resurfacing floors and other structural surfaces subject to incidental food contact in establishments operating under the Federal Meat and Poultry Inspection Program, notify FSIS inspector prior to installation. Meets California Rule 443.1 and 1113. Meets requirements of ASTM-C-881-90 Types I, III and IV: Class C, D, E & F: Grade 1.

#### **COVERAGE:**

10 lb. Kit – Approximately 4.5 sq. ft at 1/4" thickness. 50 lb. Kit – Approximately 20 sq. ft. at 1/4" thickness

# 4. TECHNICAL DATA

# **RESIN PROPERTIES**

Shore D Hardness	84
Tensile Strength	7300
Elongation	7
Flexural Strength PSI Yield	13,300
Flexural Modulus PSI x 10 <sup>5</sup>	3.75
Water Absorption % 24 hrs. @ 77° F	0.11
Compressive Strength	14,400 – 18,000 PSI
Impact Strength	144 inch/lbs.
Solids	100%

**CHEMICAL RESISTANCE:** EPO Patch and Grout resists corrosion due to spillage of most generally used acids, alkalies, salts and organic compounds.

Alkalies: Caustic, pot ash, ammonia,

Mineral Acids: lime, soda ash and others.

Sulphuric acid, phosphoric

acid, hydrochloric acid.

Organic Solvents: Petroleum, coal tar thinners, turpentines and others.

Salts: Alkalines, acid and neutral.

Oxidizing Acids and Salts:

Up to 15% nitric, chromic peroxide and bleach.

Water: Tap, distilled, di-ionized.

Foods and Organic Compounds: Sugar, mineral oils and greases, vegetable and animal fats and oils.

Soap, detergent.

Beverages: Milk, fruit and vegetable juices.

# 5. INSTALLATION

**PREPARATORY WORK:** No primer is required for applying EPO Patch and Grout epoxy patching compound. Old concrete must be free from paint, grease, oil, laitance, and other contaminates prior to application.

This may be done by shotblasting, acid cleaning, sandblasting, scarifying, detergent cleaning or grinding, as applicable. New concrete must be free from laitance, sealers, curing compounds, etc. New concrete must be clean, dry and cured a minimum of 30 days.

**METHODS:** EPO Patch and Grout is hand trowel applied to prepared concrete. Screeds may be employed to assure uniformity in thickness or for patching dished aisles, etc. Edges for light traffic areas may be feathered; however, keying of edges is recommended. The keying should be accomplished by grinding or cutting a groove approximately 1/8" to 1/4" deep along edges to be finished during preparatory work. This groove should be chipped or ground on the inner edge where patching is to take place so that key way is formed and patch it butted into vertical edges of key. Areas requiring very thin overlays may be topped by pouring or squeegee applying a self-leveling silica sand or silica flour mix.

For thin, non-skid overlays, liquid EPO Patch and Grout may be applied neat with notched squeegees or trowels, allowed to level and then covered to excess with aggregate, such as silica sand, aluminum oxide, etc. The excess aggregate should be swept or vacuumed off when dry, and the surface sealed with EPO Coat VA or EPO Coat H3H at a rate of approximately 80-100 sq. ft. per gallon.

**APPLICATION:** Large, deep holes, after preparation, should be patched or grouted prior to resurfacing. Resurfacer to be EPO Resurfacer. Apply to surface and spread with hand trowel slightly thicker than final thickness required. Allow to sit on surface for 2 – 3 minutes until liquids in mix have wet out the concrete.

Trowel to final thickness desired using slow, positive strokes of the trowel. Shaking a small amount of water on surface will facilitate final smooth troweling. Care should be taken not to use an excess of water on surface or on trowel.

MIXING: EPO Patch and Grout is designed for use with a 5 gallon can electric paddle mixer. However, it may be mixed with a strong electric drill and Jiffy mixer. Larger quantities may be mixed in a revolving arm mortar mixer. Mixing ratio for liquids is two parts "A" to one part "B, by volume.

Component A and Component B should be pre-mixed thoroughly before combining, then mixed together for 1 to 3 minutes prior to the addition of aggregate. The three-component kit and the trowel consistency mortar mix should be mixed and applied as follows:

Mix liquids 1-3 minutes until uniform in color, without streaks. Slowly add aggregate and mix approximately 3 minutes until uniform in appearance.

1) Large Batch Trowel Consistency Patching Mortar:

Add 2-1/2 to 3 volumes of silica sand (sandblast grade) for every volume of mixed epoxy. Example – Approximately 9 gallons of sand is required for 3 gallons of liquid epoxy mix.

2) Heavy Duty Grout for Filling Deep Areas:

Add 2 volumes of silica sand (sandblast grade) and 3 volumes of washed pea gravel for every 1 volume of mixed epoxy. A 3/4 gallon unit of liquid will yield 4 gallons of grout.

3) Pourable, Self-Leveling or Squeegee Mix:

Add 1-2 volumes of fine silica sand or silica flour for every 1 volume of mixed epoxy.

Aggregate should be added slowly and mixed thoroughly for an additional 3 to 5 minutes with epoxy mix until uniform mortar consistency is achieved. Mix should then be applied to floor. Approximately 30 to 45 minutes per mixed batch will be available for finishing.

**EQUIPMENT CLEAN-UP:** Clean tools and equipment immediately with Xylene or Acetone. In California, use Acetone. Do not allow epoxy to set hard on tools or mixing equipment.

**PRECAUTIONS:** EPO Patch and Grout is not flammable; however, the cleaning solvent is. Avoid prolonged contact with skin and breathing of vapor or spray mist. Use with adequate ventilation. **Do not allow product to freeze. Store at room temperature.** Keep out of reach of children.

#### 6. GUARANTEE

The manufacturer warrants that the material meets specifications listed and limits warranty to the replacement of material only.

The information contained in this specification is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use of this data or product. This information is furnished and the product sold upon the condition that the person receiving it shall make his own test to determine the suitability of the material for his particular purpose.

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