



EC

EPOXY COAT
DURABLE RESINS & HARDENERS

EC-40 Antimicrobial Epoxy

Description

EC-40 Antimicrobial Epoxy is a two-component, 100% solids, medium viscosity, low odor, high-build epoxy that inhibits the growth of fungi, bacteria and algae.

Uses

EC-40 epoxy is used to provide an epoxy floor coating that controls algal, bacterial and fungal organisms that cause odor and degrade coatings. It's application would be recommended in restaurants, hospitals, pharmaceutical manufacturing, commercial kitchens, laboratories, animal care facilities and any areas that require an anti-fungal coating. EC-40 can be used in Westcoat's Epoxy Slurry, Thin Film and Dubro Systems

Advantages

- Antimicrobial
- USDA & FDA Compliant
- 100% Solids
- Chemical Resistant
- High Strength
- Pigmented
- Low Odor
- High Build
- Superior Adhesion

Packaging

- 1 ½ gallon kits
- 15 gallon kits

Color

16 Standard Colors and Clear

INSPECTION / PREPARATION

Inspection

Surface must be structurally sound, dry, and free of oil, grease, curing agents, dirt, dust or other foreign material that may prevent proper adhesion. Surface must be rough or porous.

Preparation

Surface must be properly prepared and primed as specified for system being installed, please read individual System Specification Sheet for details.

APPLICATION

Mixing

Premix each component separately. For color consistency, box all part A's. In a clean bucket, mix 2 parts A with 1 part B, by volume of EC-40. Mix thoroughly with a low speed (400-600 rpm) drill motor for 4-5 minutes. Make sure to scrape the sides and bottom of the container during mixing. After mixing is completed, remove material from container within 5 minutes, as epoxy will begin to generate heat. Spread immediately onto the floor, as product is spread out you will have longer working time (10-15 minutes at 70 degrees).

Thinning

EC-40 can be thinned up to 100% with acetone, by volume, if thinned it must be applied thinly enough to allow solvent to escape (minimum 300 sf per gallon)

As a primer: Up to 100% acetone

As a coating: 10-20% acetone

Coverage

Coverage will vary depending on condition of surface and desired thickness.

As a primer: 300-500 sq.ft. per gallon

As a coating: 100-300 sq.ft. per gallon.

As a slurry: 50-100 sq.ft. per gallon

Applying Product

As a primer, spray or squeegee and backroll thinned EC-40 onto the surface. Primer coat should be applied evenly and worked into the surface to help seal and avoid pinholes. When thinned, apply EC-40 at a maximum of 5 mils, do not allow material to puddle.

As a coating, apply EC-40 within 24 hours after the primer coat. Immediately after mixing, spread a strip of material onto the surface along the edges where it will be "cut in" using a brush. Pour the remaining material near the "cut in" area and spread evenly using a trowel or squeegee and back roll using a 1/4 inch nap non-shedding roller. A notched trowel or squeegee will help regulate the thickness and a porcupine roller will help to release trapped air and minimize bubbles. Depending on the look, thickness, chemical, and abrasion resistance desired, 1 to 2 coats may be applied.

Dry Time

You may re-coat as soon as the surface is dry to the touch or in about 8-10 hours. Light foot traffic may be permitted in 12 hours, normal traffic in 24 hours and vehicle traffic in 72 hours. All times are based on average temperature of 70°F and 50% humidity.

Clean Up

Uncured material should be removed with an environmentally-safe solvent. Cured material should be removed mechanically.

LIMITATIONS

- This product is designed for professional use only.
- Be sure to measure and mix properly. Be aware of the pot life of mixed epoxy.
- Do not apply in temperatures below 50°F or above 90°F. Hot or cold weather may effect dry times.
- Epoxy must be cured for a minimum of 24 hours before coming in contact with water.
- Skid resistant additives are available.
- For interior use only unless protected by a UV resistant coating.
- Solvents may be required in cooler weather to lower viscosity and increase coverage of 100% solids .
- Please check with local laws governing the use of solvents.
- Do not allow Westcoat products to freeze.

HEALTH PRECAUTIONS

Inhalation of vapor or mist can cause headache, nausea irritation of nose, throat, and lungs. Avoid breathing vapors, it is strongly recommended that respirators are worn.

Prolonged or repeated skin contact can cause slight skin irritation. All epoxies have the potential of causing skin irritations or allergic reactions. Be careful not to get on

skin, clothes or in eyes. Gloves are strongly recommended. If splashed in the eye, flush with warm water and contact a physician if blurring persists.

Solvent based products are extremely flammable, extinguish all pilot lights and sources of ignition such as electrical motors. Be sure to have adequate cross ventilation prior to installing.

DISCLAIMER

PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT

OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.

MINIMUM INHIBITORY CONCENTRATION OF ORGANISMS

Algae

Chlorella vulgaris.....	16 ppm
Nostoc muscorum.....	16 ppm
Oscillatoria tenuis.....	16 ppm
Pleurococcus sp.....	16 ppm
Trentepohlia aurea.....	16 ppm

Bacteria

Alcaligenes faecalis.....	31 ppm
Flavobacterium capsulatum.....	8 ppm

Fungi

Alternaria alternata.....	2 ppm
Aureobasidium pullulans.....	4 ppm
Chaetomium globosum.....	<0.5 ppm
Cladosporium herbarum.....	2 ppm
Cladosporium cladosporoides.....	<0.5 ppm
Gliocladium virens.....	8 ppm
Paecilomyces variotti.....	1 ppm
Penicillium funiculosum.....	1 ppm
Scopulariopsis brevicaulis.....	1 ppm

Streptomyces

Streptovorticillium waksmanii.....	2 ppm
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Physical Properties

Chemical Composition	Bis A epoxy resin crosslinked with modified amines
Weight/gal (mix)	9.8
Gloss @60 Degree	101
Solids %/wt (mix)	100
Solids %/vol (mix)	100
Viscosity cPs (mix)	1074
Viscosity KU (mix)	88
VOC gm/l (mix)	9.3
Shelf Life	1 year
Color (gardner)	NA



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Technical Data

Tack Free over concrete @72°F	4 hr.
Foot Traffic over concrete @72°F	7 hr.
Foot Traffic -sealed surface- @72°F	7 hr.
Wheel Traffic	72 hr.
Pot Life (Gel Time) 150gm @72°F	.55 hr.
Heat Resistance (constant)	130°F
Heat Resistance (intermittent)	180°F
Adhesion on steel ASTM D3359	5
Adhesion on concrete ASTM D3359	5
Tensile Strength (ASTM D638)	6100 psi
Tensile Modulus (ASTM D638)	300,000 psi
Tensile Elongation (ASTM D638)	6%
Compressive Strength (ASTM D695)	8,500 psi
Compressive Modulus (ASTM D695)	280,000 psi
Flexural Strength (ASTM D790)	9,150 psi
Flexural Modulus (ASTM D790)	310,000 psi
Impact Resistance in-lbs direct/reverse	Not Tested
Hardness Shore D (ASTM D2240)	79 (7 days)/ 84 (30 days)
Pencil Hardness	3H
Reducer/Clean Up	Acetone or PCBTF

Chemical Resistance

	Clear & Pigmented
Muratic Acid (31.5% HCL)	5
Sulfuric Acid (50% H2SO4)	5
Sulfuric Acid (93% H2SO4)	3s
Nitric Acid (10% HNO3)	5
Sodium Hydroxide (50% NaOH)	5
Bleach (sodium hypochlorite)	5
Vinegar (3-5% acetic acid)	5
Transmission Fluid	5
Gasoline	5
Brake Fluid	5
409 Surface Cleaner	5
Pine Sol Solution	5
Blood & Body Fluids	5
Iodine Solution	5s
Mustard	5/5s
Ketchup	5/5
Red Wine	5/5
Acetone	5
Methyl Ethyl Ketone (MEK)	5
Xylene	5
Ethanol	5
Methanol	5

Key:

5 = Best (no effect)

4 = Softens (recovers)

3 = Softens (no recovery)

2 = Blistered (no recovery)

1 = Worst Destroyed

s = With Stain

* Contact time > 5hrs = 1



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