

# TECHNICAL DATA- EC144X

## Commercial & Industrial I: Epoxy Primer

### HIGH PERFORMANCE EPOXY COATING

#### PRODUCT DESCRIPTION:

EC144X is a two component solvent based epoxy coating that exhibits excellent characteristics for abrasion resistance, chemical resistance, and substrate penetration. This product is suitable as a primer for high build coatings and urethane or as a stand alone coating.

#### RECOMMENDED FOR:

Recommended priming or coating concrete, wood or steel. This product can withstand exposure to many common solvents and chemicals.

#### SOLIDS BY WEIGHT:

Mixed= 65% (+, -2%)

#### SOLIDS BY VOLUME:

Mixed= 52% (+, -2%)

#### VOLATILE ORGANIC CONTENT:

Part A= 3.43 pounds per gallon

Part B= 3.75 pounds per gallon

#### STANDARD COLORS:

White, off white, light gray, medium gray, tile red, and beige

#### RECOMMENDED FILM THICKNESS:

5-6 mils per coat wet thickness (yields 3 mils dry)

#### COVERAGE PER GALLON:

267 to 320 square feet @ 5-6 mils wet thickness

#### PACKAGING INFORMATION

2 gallon and 10 gallon kits (volume approx.), 2 gal kit= 1 gallon part A (8.5#/gal) (weights approximate) and 1 gal. part B (11.0#/gal) (weights approximate)

#### MIX RATIO:

1 part A to 1 part B by volume

#### SHELF LIFE:

1 year

#### FINISH CHARACTERISTICS:

Satin gloss (30-60 at 60 degrees @ glossmeter)

#### ABRASION RESISTANCE:

Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 30.2 mg loss

#### IMPACT RESISTANCE:

Gardner Impact, direct= 50 in. lb. (passed)

#### FLEXIBILITY:

No cracks on a 1/8" mandrel

#### ADHESION:

375 psi @ elcometer (concrete failure, no delamination)

#### VISCOSITY:

Mixed = 300-500 cps (typical)

#### DOT CLASSIFICATIONS:

Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

#### CURE SCHEDULE: (70°F)

pot life – 2 gallons volume ..... 3-5 hours  
tack free (dry to touch)..... 2-4 hours  
recoat or topcoat..... 4-6 hours  
light foot traffic..... 16-24 hours  
full cure (heavy traffic)..... 2-7 days

#### APPLICATION TEMPERATURE:

40-90 degrees F

#### CHEMICAL RESISTANCE:

REAGENT	RATING
acetic acid 5%	A
xylene	B
mek	A
gasoline	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric	C
10% hydrochloric acid	C
20% nitric acid	A
ethylene glycol	C
Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.	

#### PRIMER:

None required

#### TOPCOAT:

Optional- Many products are suitable as topcoats including multiple coats of this product. For added chemical resistance, color stability or UV stability, topcoat with a suitable aliphatic urethane.

#### LIMITATIONS:

- \*Colors or gloss may be affected by high humidity, low temperatures, chemical exposure, UV exposure or lighting such as sodium vapor lights.
- \*Product is not UV color stable
- \*For best results use a 3/8" nap roller
- \*Slab on grade requires moisture barrier
- \*Substrate temperature must be 5°F above dew point
- \*All new concrete must be cured for at least 30 days
- \*Product color will vary from batch to batch
- \*Physical properties are typical and not specifications
- \*Light or bright colors (white, safety yellow, etc.) may require multiple coats or a topcoat to achieve a satisfactory hide, depending on the substrate
- \*See reverse side for application instructions.
- \*See reverse side for limitations of our liability and warranty.

**TECHNICAL DATA**  
**Commercial & Industrial I: Medium Build Epoxy Coating**  
**EC707LVPX**  
**MEDIUM BUILD EPOXY/PRIMER**

**PRODUCT DESCRIPTION:**

EC707LVPX is a two component 93% (+/- 1%) solids epoxy colored coating designed for applications where a high solids primer is needed before applying high solids or 100% solids topcoats for build coats over concrete.

**RECOMMENDED FOR:**

Recommended for a high build basecoat on concrete or masonry. Product is suitable in many chemical exposure environments.

**SOLIDS BY WEIGHT:**

93% (+/- 1%)

**SOLIDS BY VOLUME:**

85% (+/-2%)

**VOLATILE ORGANIC CONTENT:**

Part A= .14#/gallon, part B= 2.1#/gallon

Mixed VOC less than 95 g/l

**STANDARD COLORS:**

Off white, light gray, medium gray, tile red, beige

**OTHER COLORS ALSO AVAILABLE:**

Dark gray, charcoal gray, brown, tan, light blue, and green

*Special colors are available upon request*

**RECOMMENDED FILM THICKNESS:**

6-12 mils

**COVERAGE PER GALLON:**

133-267 square feet per gallon @ 6-12 mils

**PACKAGING INFORMATION**

3 gallon kit (volume approximate) and 15 gallon kits (volume approximate)

**MIX RATIO:**

12 pounds (1.0 gallon) part A to 3.85 pounds (0.50 gallons) part B (volumes approx.) (standard colors)

**SHELF LIFE:**

1 year in unopened containers

**FINISH CHARACTERISTICS:**

Gloss (typical 60 at 60 degrees )

**ABRASION RESISTANCE:**

Taber adrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 45 mg loss

**ADHESION:**

430 psi @ elcometer (concrete failure, no delamination)

**VISCOSITY:**

Mixed= 500-800 cps (typical, most colors)

**DOT CLASSIFICATIONS:**

Part A "not regulated"

Part B "Flammable Liquid N.O.S., 3, UN1993,PGIIP"

**FLEXURAL STRENGTH:**

8,200 psi @ ASTM D790

**YIELD COMPRESSIVE STRENGTH:**

8,300 psi @ ASTM D695

**TENSILE STRENGTH:**

6,800 psi @ ASTM D638

**GARDNER VARIABLE IMPACTOR:**

50 inch pounds direct – passed

**ULTIMATE ELONGATION:**

2.5%

**HARDNESS:**

Shore D= 80

**CURE SCHEDULE: (70°)**

pot life – 1 1/2 gallon volume .....35-55 minutes

tack free (dry to touch)..... 6-9 hours

recoat or topcoat..... 10-14 hours

light foot traffic.....12-16 hours

full cure (heavy traffic).....2-7 days

**APPLICATION TEMPERATURE:**

60-90 degrees F with relative humidity below 85% for best results

**CHEMICAL RESISTANCE:**

REAGENT	RATING
butanol	C
xylene	C
1, 1, 1 trichloroethane	B
MEK	A
methanol	A
ethyl alcohol	C
skydrol	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric acid	C
70% sulfuric acid	A
10% HCl (aq)	C
5% acetic acid	B

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

**PRIMER:**

None required unless substrate is very porous, then use EC143X/144X to eliminate air release defects.

**TOPCOAT:**

Recommend epoxy coatings or high builds. Topcoat with aliphatic urethanes for increased UV stability.

**LIMITATIONS:**

\*Color stability or gloss may be affected by environmental conditions such as high humidity or chemical exposure.

\*Colors may vary from batch to batch.

\*This product is not UV color stable but has fairly good color stability, topcoat recommended but optional.

\*Substrate temperature must be 5°F above dew point.

\*For best results, apply a 1/4" nap roller.

\*All new concrete must be cured for at least 30 days prior to application.

\*Although a thinner or lower solids primer is generally unnecessary, some more porous substrates may benefit by the use of a lower solid primer, with this product as an intermediate coat.

\*Physical properties data based on neat resin.

\*See reverse side for application instructions.

\*Physical properties are typical values and not specifications.

\*See reverse side for limitations of our liability and warranty.

# TECHNICAL DATA- EC321X

## Commercial & Industrial I: Military Grade Topcoat

### HIGH PERFORMANCE URETHANE

#### PRODUCT DESCRIPTION:

EC321X is a two component polyester/aliphatic polyurethane floor sealer that exhibits excellent characteristics for abrasion resistance, chemical resistance, flexibility, weathering and UV stability.

#### RECOMMENDED FOR:

Recommended for auto service centers, warehouses, computer rooms, laboratories, aircraft hangers, cafeterias, exterior tanks, indoor or outdoor service and chemical exposure areas.

#### SOLIDS BY WEIGHT:

Mixed= 60% (colors); 56% (clear) (+,-2%)

#### SOLIDS BY VOLUME:

Mixed= 53% (colors); 53% (clear) (+,-2%)

#### VOLATILE ORGANIC CONTENT:

Less than 448 g/l

#### STANDARD COLORS:

White, off white, light gray, medium gray, tile red, beige, and clear

#### RECOMMENDED FILM THICKNESS:

3-5 mils per coat wet thickness (yields 2-3 mils dry)

#### COVERAGE PER GALLON:

320 to 500 square feet @ 3-5 mils wet thickness

#### PACKAGING INFORMATION

3 gallon and 15 gallon kits 3 gal kit= 2 gallons part A (10.5#/gal-colors) or (8.75#/gal-clear) and 1 gallon part B (8.5#/gal.) (weights and volumes approximate)

#### MIX RATIO:

2 parts A to 1 part B by volume

#### SHELF LIFE:

1 year

#### FINISH CHARACTERISTICS:

High gloss (>80 at 60 degrees @ glossmeter)

#### ABRASION RESISTANCE:

Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 20.0 mg loss

#### IMPACT RESISTANCE:

Gardner Impact, direct & reverse = 160 in. lb. (passed)

#### FLEXIBILITY:

No cracks on a 1/8" mandrel

#### ADHESION:

360 psi @ elcometer (concrete failure, no delamination)

#### VISCOSITY:

Mixed = 200-400 cps (typical, most colors)

#### DOT CLASSIFICATIONS:

Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

#### HARDNESS:

Shore D = 72

#### CURE SCHEDULE: (70°F)

pot life – 1 1/2 gallons volume ..... 2-5 hours  
tack free (dry to touch)..... 2-4 hours  
recoat or topcoat..... 4-8 hours  
light foot traffic..... 14-24 hours  
full cure (heavy traffic)..... 3-5 days

#### APPLICATION TEMPERATURE:

45-90 degrees F with relative humidity below 90%

#### CHEMICAL RESISTANCE:

REAGENT	RATING
acetic acid 5%	C
xylene	E
mek	B
methyl alcohol	B
gasoline	D
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric	D
10% hydrochloric acid	D
20% nitric acid	C
ethylene glycol	D

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

#### PRIMER:

Recommend EC143X/144X, EC154X or EC015X

#### TOPCOAT:

None recommended

#### LIMITATIONS:

Colors or gloss may be affected by high humidity, low temperatures, chemical exposure, or exposure to lighting such as sodium vapor lights. For best results use a high quality 3/8" nap roller. Slab on grade requires moisture barrier. Substrate temperature must be 5°F above dew point. All new concrete must be cured for at least 30 days. Physical properties are typical values and not specifications. Light or bright colors (white, safety yellow, etc.) may require multiple coats or a suitable color coordinated primer to achieve a satisfactory hide. Tire contact may cause staining and discoloration. Colors may vary from batch to batch, therefore, use only product from the same batch for an entire job. See reverse side for application instructions. See reverse side for limitations of our liability and warranty.