

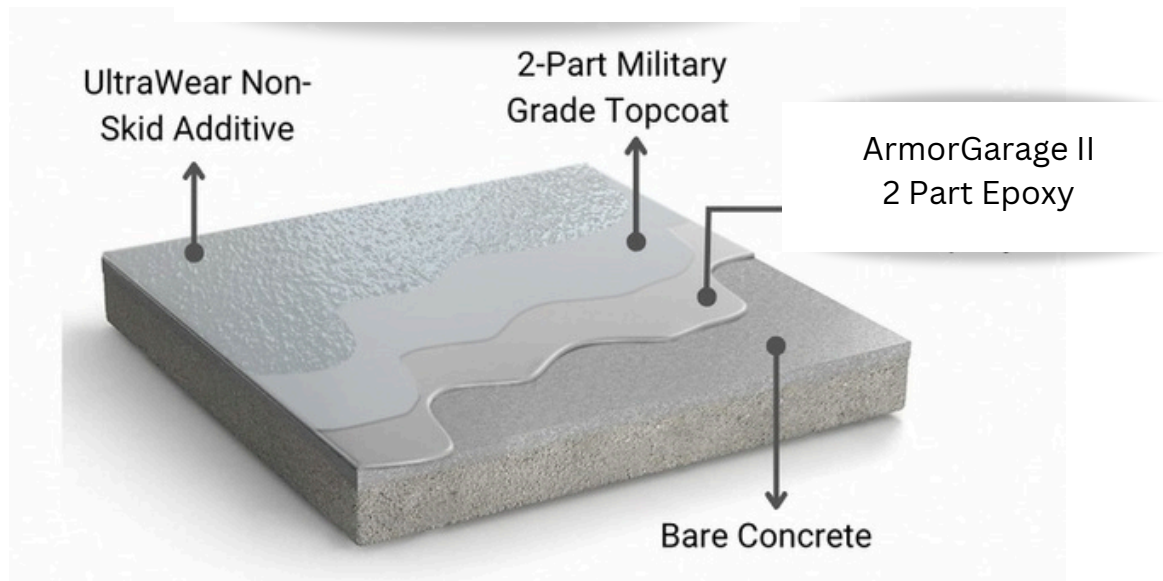
TDS

ArmorGarage II: Standard VOC 2-Layer Epoxy System



TDS Information

- **ArmorGarage II 2-Part Epoxy Basecoat**
- **ArmorGarage II 2-Part Military Grade Topcoat**



www.armorgarage.com

1260 North Ave
Plainfield, NJ 07062

9.23-V1



ARM144X ArmorGarage II

- STD VOC PRIMER

PRODUCT DESCRIPTION

ARM144X is a two component high performance solvent based epoxy coating that exhibits excellent characteristics for abrasion resistance, chemical resistance, substrate penetration and adhesion. This product is suitable as a primer for ArmorGarage coatings and urethanes. **RECOMMENDED FOR:** priming concrete, wood or masonry where permanent adhesion is required.

SPECS

SOLIDS BY WEIGHT	Mixed = 65% (+, - 2%) Mixed = 52% (+, - 2%)
SOLIDS BY VOLUME	5-6 mils per coat wet thickness (yields 3 mils dry)
RECOMMENDED FILM THICKNESS	
PACKAGING INFORMATION	2 gallon and 10 gallon kits
MIX RATIO	1 part A to 1 part B by volume
SHELF LIFE	1 year in unopened containers
FINISH CHARACTERISTICS	Satin gloss (30-60 at 60 degrees @ glossmeter)
IMPACT RESISTANCE	Gardner Impact, direct= 50 in. lb. (passed)
FLEXIBILITY	No cracks on a 1/8" mandrel
ADHESION	400 psi @ elcometer (Concrete failure, no delamination)
VISCOSITY	Mixed = 300-500 cps (typical)
VOLATILE ORGANIC CONTENT	Part A= 3.43 pounds per gallon/Part B= 3.75 pounds per gallon VOC mixed < 427 g/l
ABRASION RESISTANCE	Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 30.2 mg loss
DOT CLASSIFICATIONS	Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII" Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

COVERAGE

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

COLORS

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

CURE SCHEDULE

POT LIFE (2 gal volume)	3-5 hours 2-
TACK FREE (Dry to touch)	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°F

PRIMERS

None required

TOPCOAT

Optional, Many products are suitable as topcoats. For added chemical resistance, color stability or UV stability, topcoat with a suitable aliphatic urethane or ArmorGarage acid resistant epoxy topcoat.

CHEMICAL RESISTANCE

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: 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.

FEATURES



Extended Pot Life



Multiple Colors



Super Durable



Easy to Install



Roll On Application

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.



ARM321X ARMORULTRA MILITARY GRADE TOPCOAT

PRODUCT DESCRIPTION

ARM321X 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.

SPECS

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
RECOMMENDED FILM THICKNESS	3-5 mils per coat wet thickness (yields 2-3 mils dry)
PACKAGING INFORMATION	3 gallon and 15 gallon kits (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)
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) Shore D
HARDNESS	= 72
DOT CLASSIFICATIONS	Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII" Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"
ABRASION RESISTANCE	Taber abrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 8.0 mg loss

COVERAGE

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

COLORS

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

CURE SCHEDULE

POT LIFE (1.5 gal 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)	2 days
APPLICATION TEMPERATURE	45-90 degrees F with relative humidity below 90%

PRIMERS

Recommend ARMX143 OR 144, ARMX154 or ARMX015

TOPCOAT

None recommended

CHEMICAL RESISTANCE

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: 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.

FEATURES



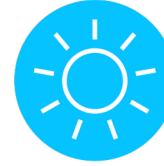
Chemical Resistance



Multiple Colors



Super Durable



UV Stable



Roll On Application

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. Colors may vary from batch to batch, therefore, use only product from the same batch for an entire job.



ARMOR ULTRAWEAR NON-SLIP ADDITIVE

PRODUCT DESCRIPTION

Two grades of the ultrawear are available. The standard version is used for increasing wear resistance and grip while the 60 mesh is used for extra heavy slip resistance. **RECOMMENDED FOR:** Recommended for use in our ARM321X and ARM322X polyurethane line of products.

PROPERTIES

COLOR	White/off white crystalline granules
VOC	0 g/l
TOTAL SOLIDS (WEIGHT)	100%
MIX RATIO	1.60# aggregate for every gallon of mixed liquid (1/2 pint per gallon)
TENSILE STRENGTH	
APPARENT POROSITY	3% - 5%
REFRACTIVE INDEX	1.70 - 1.80
HARDNESS	Mohs hardness of 9
WATER ABSORPTION	Approximately 1 percent
MELTING TEMPERATURE	Greater than 2,000 degrees Centigrade
BULK SPECIFIC GRAVITY	3.50 - 3.60 (typical) (true density of 3.9-4.0)
-	
DOT CLASSIFICATION	not regulated

PRODCUT USE

HWS Ultrawear products are high density, coarse tubular aluminas that have been converted to corundum form. As such, they are fully shrunk in the manufacturing process. They are produced by sintering calcined alumina at a temperature just under the fusion point of the aluminum oxide. These aluminum particles are then crushed, graded or screened and then ground to their specific powdered particle size. These particles have a high thermal conductivity and good resistance to thermal and mechanical shock. In addition, these particles have a high heat capacity, high electrical capacity while providing additional abrasion resistance and durability.

STORAGE AND SHELF LIFE

Always determine suitability by applying a test area. When adding to Urethane products, gloss and slip resistance should be evaluated to determine suitability. After adding to the Urethane product, occasionally re-stir to insure a homogenous mixture and uniform application appearance. 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. Properties are typical values and not specifications. Colors may vary from batch to batch. See individual technical data sheets for application instructions.

PRODUCT STORAGE: Store product in an area so as to bring the material to normal room temperature before using. Keep material dry.

PRODUCT MIXING: The liquid portion of the product selected for use is first thoroughly mixed at the correct mix ratio. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak free. After the liquids are mixed, add in the correct amount of aggregate. Avoid whipping air into the coating. Improper mixing may result in product failure.

PRODUCT APPLICATION: See topcoat technical data sheets for specific application procedures. Stir the mixed material occasionally to prevent the settling out of the added aggregate. Maintain temperatures within the recommended ranges during the application and curing process.

Typical Chemical Composition:

Properties	Product
Al ₂ O ₃	>95%
SiO ₂	<0.05%
Fe ₂ O ₃	<.10%
Na ₂ O	<0.30%
L.O.I (300-1200°C)	0.00%
Alpha Phase	>99%

PLEASE READ CAREFULLY The information herein is to assist customers in determining whether this product is suitable for various applications. Customers assume full responsibility for quality control, testing and determination of suitability of products for its intended application or use. We warrant that our products will meet our written specifications. We make no other warranty of merchantability of fitness for a particular purpose. Our total liability and customers' exclusive remedy for all proven claims is replacement of nonconforming product and in no event shall we be liable for any other damages, including without limitation to special, incidental, punitive, or consequential damages.