ARMOR GARAGE INC.
Manufacturers of High Performance Industrial Coatings

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AG257X ARMORGARAGE

CHEMICAL RESISTANT NOVOLAC PRIMER

PRODUCT DESCRIPTION

AG257X is a two-component novolac epoxy primer in colors. AG257X offers high solids, good substrate penetration, and low odor. This primer reduces air release generation from the substrate when applying higher-solids novolac topcoats, resulting in fewer surface imperfections in high-build and self-leveling type coatings.
Recommended for: Priming concrete and cement substrates prior to applying a novolac topcoat. Ideal for chemical containment areas, bund flooring, secondary containment zones, semiconductor fabs, chemical processing plants, battery rooms, and any environment with chemical exposure risks. This product can withstand exposure to many chemicals. Please refer to our Chemical & Acid Guide for full list.

Chemical Resistance	Low Odor	Super Durable	Roll-On Application

TECHNICAL DATA

SOLIDS BY WEIGHT:	85%	**HARDNESS:**	Not specified (primer coat)
SOLIDS BY VOLUME:	80%	**ADHESION:**	375 psi (concrete failure, no delam)
VOC CONTENT:	< 183 g/L (mixed)	**IMPACT RESISTANCE:**	Gardner 50 in-lb direct (passed)
FILM THICKNESS:	5–6 mils/coat (yields 4–5 mils dry)	**ABRASION:**	Taber CS-17 / 500 cyc = 26.1 mg loss
MIX RATIO:	2 Parts A : 1 Part B by volume	**FINISH:**	Satin gloss (>20 @ 60° glossmeter)
VISCOSITY:	250–500 cps (mixed)	**COVERAGE:**	275–300 sf/gal per coat
SHELF LIFE:	1 year in unopened containers	**COLORS:**	Lt Gray, Med Gray, Tile Red
FLEXIBILITY:	No cracks on 1/8" mandrel	**PRIMERS:**	None required
DOT CLASS:	Flammable Liquid N.O.S., 3, UN1993 PGIII	**TOPCOAT:**	AG253X Novolac Topcoat (recommended)

CURE SCHEDULE

Stage	Time	Notes
Pot Life (1.5 gal)	1–3 hours	Working time after mixing
Tack Free	4–7 hours	Dry to touch
Recoat or Topcoat	7–10 hours	Thumb test: no fingerprint impression
Light Foot Traffic	12–24 hours	No heavy objects or vehicles
Full Cure (heavy traffic)	2–7 days	Chemical exposure and heavy traffic
Application Temp	60–90°F	Relative humidity below 90%

CHEMICAL RESISTANCE

Chemical	Rating	Chemical	Rating
Acetic Acid, 5%	**D**	10% Sodium Hydroxide	**E**
Xylene	**D**	50% Sodium Hydroxide	**E**
Toluene	**D**	10% Sulfuric Acid	**E**
1,1,1 Trichloroethane	**C**	10% Hydrochloric Acid	**E**
MEK	**C**	20% Nitric Acid	**C**
Methyl Alcohol	**C**	Ethylene Glycol	**E**
Gasoline	**D**		

Rating Key: A – Not recommended | B – 2-hr splash/spill | C – 8-hr splash/spill | D – 72-hr immersion | E – Long-term immersion.

PRODUCT STORAGE

Store product at normal room temperature. Continuous storage should be between 60°F and 90°F. Low temperatures or great temperature fluctuations may cause product crystallization.

SURFACE PREPARATION

Surface preparation varies by system. For thin-build systems (3–10 mils dry), mechanically scarify or acid etch to a suitable profile. For systems above 10 mils dry, fine brush blast (shot blast) is recommended. All dirt, oil, dust, foreign contaminants, and laitance must be removed. Perform moisture test: place a 4’ × 4’ plastic sheet on the substrate, tape edges; if dry after 24 hours, substrate is suitable. This test also identifies hydrostatic pressure problems. Surface profile should meet ICRI CSP 3–5 guidelines.

PRODUCT MIXING

Mix ratio: 9.95 lb Part A to 4.15 lb Part B by weight (2:1 by volume). Combine both components and mix with slow-speed equipment (jiffy mixer) until thoroughly mixed and streak-free. Improper mixing may result in product failure.

PRODUCT APPLICATION

Apply by brush or 3/8" nap roller. Maintain temperature and humidity within recommended ranges during application and curing. Improper mixing or applying too thick can cause product failure. If using non-skid additive, broadcast directly onto wet coating. Medium broadcast rate of aluminum oxide: 1 lb per 100 sf.

RECOATING OR TOPCOATING

This is a primer; topcoat with AG253X Novolac Topcoat. Before recoating, verify solvents have evaporated: press with thumb to confirm no fingerprint impression remains. Colder temperatures require longer cure before recoating. Check for epoxy blush (whitish, greasy film or deglossing); remove with standard detergent cleaner before topcoating. Multiple coats of AG257X are suitable prior to topcoating.

CLEANUP

Use xylol during application. For floor cleaning, test each cleaner in a small area first. Some cleaners may affect the color of the installed coating.

RESTRICTIONS

Restrict use to light traffic and non-harsh chemicals until fully cured. Keep floor dry through the full cure cycle. Surface may be slippery when wet or contaminated; keep clean and dry.

LIMITATIONS

This product should be topcoated with a suitable novolac epoxy topcoat. Colors may be affected by high humidity, low temperature, or chemical exposure. 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. Colors may vary from batch to batch; use only product from the same batch for an entire job. Physical properties are typical values and not specifications.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information is not a representation or warranty. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE THAT OUR PRODUCT SHALL BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE. Our liability is limited to the net selling price or replacement of our product, at our option.

Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.

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AG253X ARMORGARAGE

HEAVY DUTY NOVOLAC TOPCOAT

PRODUCT DESCRIPTION

AG253X is a two-component colored high-solids novolac epoxy coating designed for applications where splash and spills of acids, chemicals, and solvents occur. This heavy-duty topcoat provides superior chemical resistance including long-term immersion resistance to sulfuric acid, sodium hydroxide, and hydrochloric acid.
Recommended for: High-build topcoat for traffic areas, chemical troughs and curbs, bund flooring, secondary containment zones, chemical spill areas, semiconductor fabs, battery rooms, breweries, wineries, food processing facilities, pharmaceutical plants, and chemical processing environments. Suitable for cement, masonry, or brick substrates.

Chemical Resistance	Heat Resistant	Super Durable	Roll-On Application

TECHNICAL DATA

SOLIDS (WT/VOL):	96% / 94% (+/- 1%)	**COMPRESSIVE STR:**	9,900 psi (ASTM D695)
VOC CONTENT:	< 44 g/L	**TENSILE STR:**	6,680 psi (ASTM D638)
FILM THICKNESS:	16–18 mils (recommended)	**FLEXURAL STR:**	9,610 psi (ASTM D790)
MIX RATIO:	2 Parts A : 1 Part B by volume	**ADHESION:**	425 psi (concrete failure, no delam)
VISCOSITY:	2,200–2,700 cps (mixed)	**IMPACT RESISTANCE:**	Gardner 50 in-lb direct (passed)
SHELF LIFE:	1 year in unopened containers	**ABRASION:**	8 mg loss with Ultrawear Non-Slip Additive
HARDNESS:	Shore D = 88	**FINISH:**	Not specified
HEAT DEFLECTION:	115.5°F (ASTM D648)	**COVERAGE:**	90–115 sf/gal @ 16–18 mils
ELONGATION:	4.7%	**COLORS:**	Lt Gray, Med Gray, Tile Red
DOT CLASS:	Part B: Corrosive Liquid N.O.S., 8, UN1760 PGIII	**PRIMERS:**	AG257X or AG903SLX (required)

CURE SCHEDULE

Stage	Time	Notes
Pot Life (1.5 gal)	25–35 minutes	Apply immediately after mixing
Tack Free	5–7 hours	Dry to touch
Recoat or Topcoat	5–10 hours	Degloss previous coats before recoating
Light Foot Traffic	10–18 hours	No heavy objects or vehicles
Full Cure (heavy traffic)	2–7 days	Chemical exposure and heavy traffic
Application Temp	60–95°F	Relative humidity below 90%

CHEMICAL RESISTANCE

Chemical	Rating	Chemical	Rating
Xylene	D	10% Sodium Hydroxide	E
1,1,1 Trichloroethane	C	50% Sodium Hydroxide	E
MEK	C	10% Sulfuric Acid	E
Methanol	C	70% Sulfuric Acid	C
Ethyl Alcohol	C	10% HCl (aq)	D
Skydrol	C	5% Acetic Acid	D

Rating Key: A – Not recommended | B – 2-hr splash/spill | C – 8-hr splash/spill | D – 72-hr immersion | E – Long-term immersion.

PRODUCT STORAGE

Store at normal room temperature. Continuous storage 60°F–90°F. Low temperatures or great temperature fluctuations may cause product crystallization.

SURFACE PREPARATION

Fine brush blast (shot blast) to remove all laitance and provide a suitable profile. All dirt, foreign contaminants, oil, and laitance must be removed. Perform moisture test: place a 4’ × 4’ plastic sheet on substrate, tape edges; if dry after 24 hours, substrate is suitable. This test also identifies hydrostatic pressure issues.

PRIMING

A suitable primer such as AG257X must be applied before this product. If a primer is not used, more porous substrates may cause outgassing and possible surface defects.

PRODUCT MIXING

Mix ratio: 10.15 lb Part A to 4.2 lb Part B for standard colors (2:1 by volume). Pre-measured kits should be mixed as supplied – do not break kits unless suitable weighing equipment is available. Mix with slow-speed equipment (jiffy mixer) until thoroughly mixed and streak-free. Transfer to another pail and remix. Improper mixing may result in product failure.

PRODUCT APPLICATION

Apply by brush, 1/4" nap roller, or serrated squeegee with backroll. Maintain temperature and humidity within recommended ranges. If concrete conditions or aggressive mixing causes air entrapment, use an air release roller prior to the coating tacking off. For bund walls, containment curbs, and vertical surfaces, apply in multiple thinner coats to prevent sagging. Ensure continuous coverage at all joints, penetrations, and floor-to-wall transitions.

RECOATING OR TOPCOATING

Verify coating has tacked off before recoating. Degloss all previous coats for trouble-free bond. Colder temperatures require more cure time. Check for epoxy blush (whitish, greasy film); remove before recoating. Multiple coats are acceptable and recommended for increased chemical resistance and build in containment areas.

CLEANUP

Use xylol during application. For floor cleaning, test each cleaner in a small area first. Some cleaners may affect the color of the installed coating.

RESTRICTIONS

Restrict to light traffic and non-harsh chemicals until fully cured. Keep floor dry through full cure cycle. Surface may be slippery when wet; keep clean and dry.

LIMITATIONS

Product is not UV color stable. Color stability or gloss may be affected by high humidity, low temperature, or chemical exposure. Exposure to sodium vapor lights may cause discoloration. Colors may vary from batch to batch; use only product from the same batch. Apply a suitable primer before using this product. Mixtures of chemicals and applications at elevated temperatures should be thoroughly evaluated before applying. A test patch is recommended. Substrate temp must be 5°F above dew point. All new concrete cured at least 30 days. For best results, apply with a 1/4" nap roller.

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Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.