



GARAGEGUARD®

WATERBORNE EPOXY SEMI GLOSS

EGG-XXXX



The new generation, waterborne, 2-components epoxy enamel intended for painting interior concrete floors. Semi-gloss.

BENEFITS & GENERAL DESCRIPTION:

GarageGuard® Waterborne Epoxy is two-components, water-based catalyzed epoxy which offers performance equal to traditional solvent based epoxy systems. It provides superior chemical, abrasion, impact, intensive foot traffic and hot tires resistance (generally product resists most automotive fluids). The highly cross-linked film provides years of service.

Additionally this product may be applied to most generic coating types without the fear of lifting or wrinkling.

Enamel is designed for use on floors in basements, garages, warehouses and other concrete surfaces in residential and commercial objects (including industrial spaces, however not designed as a heavy duty floor finish), food and beverage processing, transportation, healthcare, schools, large commercial structures, and other areas where a performance epoxy is needed. This product is suitable for use in USDA inspected facilities.

Not recommended for use in immersion service or acid exposures.

PROPERTIES:

- **excellent durability and abrasion as well impact resistance**
- **high chemical resistance**
- **resists hot tires, intensive foot traffic and the most automotive fluids**
- **excellent adhesion to the concrete and to the most existing coatings without lifting**
- **fast return to service**
- **soap and water clean-up**

Technical information	
vehicle type:	amine adduct epoxy
pigment type:	titanium dioxide
volume solids:	50.5 ±1.0%
coverage:	approx. 6-8 m ² /l for one coat depending on surface texture, porosity and absorbing properties, application method and painting tool used. Test should be perform in order to determine the coverage of the given surface.
recommended film thickness:	
- wet	147,9 µm
- dry	68,8 µm
dry time (at temp. + 25°C and relative air humidity 50%):	
- to touch:	min. 2 hours
- to recoat (the next coat application):	min. 8 hours
- return to service:	foot traffic: light - min. 24 hours, heavy - min. 48 hours, vehicular traffic: cool tires – min. 72 hours, hot tires – 5 to 7 days.
- full cure and final technical parameters:	approx. 7-10 days
dries by:	chemical reaction
viscosity:	70 - 80 KU
flash point:	93,33°C or greater (TT-P-141, Method 4293)
gloss/sheen:	semi-gloss (35-45 @ 60°)
colors:	bases „Neutral Kit EGG-190S“ and „Tint Kit EGG-111S“ tinted to 23 colors from „GarageGuard“ pallet in BENJAMIN MOORE® COLOR PREVIEW® tinting system.
painting surface temperature:	min +15°C, max. +32°C
thin with:	not recommended, if needed use clean water
clean up thinner:	clean water
weight per 1 l:	1,31 kg (mixed as recommended)
mixed ratio (by volume):	3 : 1
Pot life (at 25°C):	4 hours
storage temperature:	min. +5°C, max. +35°C
VOC:	EU VOC limit for this product (Cat. A/J): 130 g/l (2010). Max. VOC: <140 g/l.
packaging*:	The ready to use product – enamel (component A) mixed with hardener (component B) - 3,78 l

*3,78 L = 1 gallon;

RECOMMENDED FOR

Range of use: ● interior: bare or finished previously concrete floors.

Surface preparation:

- **new concrete**: new concrete floors must be allowed to cure at least 60-90 days. Remove dirt, any powder, wax, grease and oil spots as well as loose or weak parts of substrate. All imperfections and cracks must be filled with a special patching compound, similar to original used one. The glossy surfaces must be dulled. Remove microorganisms (e.g. fungus and mildew) using a special agent.

All bare concrete floors need to be etched with a concrete etching solution or 10% muriatic acid solution to open and roughen the surface enough to assure good adhesion and to neutralize the alkali salts. Follow the manufacturer's instructions and safety precautions. Be sure to protect your eyes (goggles) and skin (rubber gloves and boots) while preparing and using any acid solution. Neutralize the acid according to instruction on the etching solution package or mix 0,45 kg of baking soda in 18,9 liters of clean water and distribute over the floor. Thoroughly rinse the floor with clean water and allow to dry thoroughly (at least 24 hours). Check for dryness using a moisture meter specific to masonry surfaces (2% moisture content or less) or ASTM D-4253 Plastic Sheet Test. Tape down a clear piece of plastic to the concrete floor for 24-48 hours; if moisture collects or slab has darkened the moisture/vapor transmission is too high to accept a coating and will need additional drying time. The floor should have a roughened feel of about 80 grit sandpaper.

Such prepared surface finish with *GARAGEGUARD® WATERBORNE EPOXY SEMI GLOSS EGG-XXXX*.

● **previously painted surfaces:** remove dirt, any powder, wax, grease and oil spots as well as loose or weak parts of substrate. All imperfections and cracks must be filled with a special patching compound, similar to original used one. The glossy surfaces must be dulled. Remove microorganisms (e.g. fungus and mildew) using a special agent.

Warning: test the remaining paint for adhesion. Cut an X in the paint with a single edge razor blade. Apply duct tape firmly to the floor directly over the X. Remove the duct tape with one quick pull. If more than 25% of the paint at the X is removed, do not apply GarageGuard® until all existing paint is removed.

Do not use muriatic acid or other etching materials on a painted floor.

Such prepared surface finish with *GARAGEGUARD® WATERBORNE EPOXY SEMI GLOSS EGG-XXXX*.

Warning: in case of old paint layers renovation the test (compatibility) should be performed on small surface area. Positive result, decides on application of the product on the whole surface.

APPLICATION

The substrate must be solid, completely dry, clean and free of dust (and etched in case of bare concrete floors).

This is two component kit and is pre-proportioned for error free mixing. NEVER use the enamel without hardener! DO NOT vary from these instructions. FOR PROFESSIONAL USE ONLY.

Where nonskid properties are required, a non-skid additive should be used.

Mix component "A" and component "B" separately. Carefully empty the entire contents of catalyst – Part B into the can of GarageGuard® – Part A component resin; scrape the sides of the pail of Part B to make sure all liquid has been added. Part A container is oversized to completely accept entire content of Part B material. You will achieve the mixture in the ratio 3:1 (enamel : hardener).

Using a jiffy mixer at low speed, blend this mixture for 3-5 minutes until completely blended. Keep the mixing blade turning at a slow speed to minimize whipping air into material. Scrape sides of pail during the mixing process.

Care must be taken to assure both components are completely mixed in order to avoid partially cured spots in the coating. Allow to induct for 30 minutes, and mix gently before the application.

It is extremely important to remember that epoxy coatings have a limited pot life; therefore it is wise to make sure sufficient manpower and correct application tools are in order prior to starting the mixing sequence. Do not mix more material than can be used in 4 hours.

The pot life of mixture at the temperature of +25°C is max. 4 hours. The higher temperature of the air and mixture will shorten the pot life. The next coat apply after min. 8 hours.

Do not mix partial containers. Thin with water ONLY. Do not exceed 10% reduction.

Apply one or two coats of enamel by brush, roller or spraying gun. For airless method provide the following parameters: pressure 144,8 bar and tip 0.015-0.019. Air spray (pressure pot): DeVilbiss MBC or JGA gun with 704 or 765 air cap and Fluid Tip E.

Work using „wet in wet” system, avoiding creating overlaps. Technological breaks must be planned at the floor corners or other surface elements. The next coat apply after min. 8 hours. If more than 48 hours elapses between coats, sand the film to provide sufficient profile.

Product will not cure at surface temperatures below + 10°C.

Special notes: all glossy surfaces can be slippery. Where nonskid properties are required, a non-skid additive should be used.

It's possible to use decorative flakes "GarageGuard Decorative Flakes" on still fresh enamel coat.

Do not apply on the substrates painted previously with limewash or glue paints.

It is recommended to use BENJAMIN MOORE or PREMIER painting tools and FrogTape® (with PaintBlock Technology®), KIP® or Painter's Matte Green® masking tapes.

Weather conditions during and after application:

Carry out the painting work at the air and substrate temperature > +15°C. The optimal conditions: + 20°C and relative air humidity 50%. Do not apply in direct sunlight or on a hot surface. Product will not cure at surface temperatures below + 10°C. Do to paint if surface temperature is within 5 degrees of the dew point.

Drying time:

At the temperature of +25°C and relative air humidity 50% the product dries approx. 8 hours. At mentioned weather conditions the next coat apply after min. 8 hours but no later than after 48 hours. Return to service: foot traffic: light - min. 24 hours, heavy - min. 48 hours, vehicular traffic: cool tires – min. 72 hours, hot tires – 5 to 7 days. Full cure and final technical parameters after 7-10 days.

Clean up: Wash painting tools in warm soapy water immediately after use.

Warning:

Garage floors: many tires contain compounds which may attack epoxy enamels, resulting in creating some stains and discoloration. In some cases epoxy enamels will yellow. Prolonged exposure to brake fluid can results in some stains impossible to remove.

Caution: all floor coatings may become slippery when wet. Where non-skid characteristics are desired, use an appropriate anti-slip aggregate.

Ensure enough amount of product from one production batch in order to avoid some color differences.

The full cure, final adhesion properties and technical parameters achieved after min. 7 days.

Do not overdose the colorants in BENJAMIN MOORE® COLOR PREVIEW® tinting system.

Producer is not responsible for bad quality of the painted surface if the above instructions aren't obeyed. Producer is not responsible for the damages appeared in results of use over 3,78 l of enamel, because to this quantity any defects of product should be demonstrated and notified in the proper point of sale.

ENVIRONMENTAL: Do not pour liquid residues into sewerage systems. They should be referred to specialized companies with appropriate authorization for disposal.

Empty cans and liquid waste should be recycled or disposed of in accordance with local regulations.

HEALTH & SAFETY INFORMATION: Danger. Causes skin irritation and serious eye damage. May cause cancer.

Contains Crystalline Silica that can cause cancer when in respirable form (spray mist or sanding dust). May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged repeated exposure.

Contains: Aliphatic polyamine, Glycol ethers, Epoxy Resin. Contains ingredients which may cause blood damage based on animal data. Do not eat. Keep out of reach of children. Avoid contact with eyes and prolonged contact with skin. In case of eye contact, flush immediately with plenty of water. In case of ingestion clean mouth with water and afterwards drink plenty of water. Consult a physician; show this container or label. Do not breathe spray mist or sanding dust. Use only with adequate ventilation. Ensure fresh air entry during application and drying. During application in closed spaces, wear the protective clothing, gloves and eye/face protection. In case of spraying method wear approved respirator. MSDS available on demand of consumer.

EXPIRE DATE: 4 years from the production date in the factory-sealed package The expire date is indicated on the packaging.

CERTIFICATES & APPROVALS:

- The product is qualified with Hygienic Certificate.



This specification is effective from: 03.2022.

B.M. Polska Sp. z o. o. guarantee the higher product quality, however can not control the way of its application. The producer is not responsible for the work of Designer and Contractor. The information presented in this technical data sheet were given in good faith, in accordance with the current state of knowledge and practical experience. It does not relieve you of responsibility for carrying out work in accordance with the building construction rules as well as health and safety regulations.

B. M. Poland Sp. z o. o. is not liable for any damage and defects caused by the combined use of the offered products with materials from the portfolio of other manufacturers, as well as in the event of any recipe changes by buyers and users.

B.M Polska Sp. z o. o. reserves the right to change the content in subsequent editions of the technical data sheet without prior notification of the fact to the Clients and full right to modify the products as part of their technological development.

PRODUCER: Benjamin Moore & Co., 101 Paragon Drive, Montvale, NJ 07645, USA, tel. (201) 573 9600, www.benjaminmoore.com
EXCLUSIVE REPRESENTATIVE: B.M. Polska Sp. z o.o., ul. Polczyńska 100, 01-302 Warszawa, tel. + 48 22 533 52 90, fax. +48 22 533 52 99 www.benjaminmoore.pl www.bmpolska.com