

PPG NOVAGUARD® 5051 Novolac Epoxy Coating

formerly known as ICO Super Guard Coating

DESCRIPTION

Two-component, 100% solids, chemical resistant novolac epoxy coating

PRINCIPAL CHARACTERISTICS

- Excellent chemical resistance for tough environments
- Low odor
- Bonds to dry and damp concrete, masonry, metal and wood
- Good resistance to thermal and mechanical shock
- Easy to clean
- Can be applied horizontally, vertically and overhead
- TYPICAL USES:
- Suitable for many secondary containment applications

COLOR AND GLOSS LEVEL

- Light Gray, Medium Gray, Dark Gray, Tile Red, & Safety Blue
- High gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	9.3 lb/US gal (1.1 kg/l)
Volume solids	100 ± 2%
VOC (Supplied)	EPA Method 24: 0.07 lb/US gal (7.9 g/l)
Recommended dry film thickness	10.0 - 20.0 mils (250 - 500 µm) depending on system
Theoretical spreading rate	160 ft ² /kit over broadcast (3.9 m ² /kit)
Overcoating Interval	Maximum: 8 hours
Full cure after	7 days
Shelf life	Part A: at least 12 months when stored cool and dry Part B: at least 12 months when stored cool and dry

Note:

- If overcoat time is exceeded, abrade and clean surface before recoating



PPG NOVAGUARD® 5051 Novolac Epoxy Coating

formerly known as ICO Super Guard Coating

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Ambient temperature should be between 50°F (10°C) and 90°F (32°C) during application
- Do not apply this product when substrate temperature is below 50°F (10°C) or above 90°F (32°C)
- All surfaces must be sound, clean, free of oil, grease, dirt, mildew, curing compounds, loose and flaking paint, and other foreign substances

Concrete

- New concrete must cure a minimum of 28 days prior to application of this product
- Prepare in accordance with SSPC SP-13 guidelines
- Surface texture of minimum 40-50 grit sandpaper is desired for maximum adhesion
- On worn, spalled concrete, pre-fill with NOVAGUARD 5090 and allow to dry tack-free.

SYSTEM SPECIFICATION

- If substrate is particularly porous, PPG Flooring™ 912 LV primer can be applied and allowed to dry tack free before applying first coat
- Refer to the PPG FLR 912 LV Primer Product Data Sheet for important information on product use and application

INSTRUCTIONS FOR USE

- Mixing ratio by volume – Part A : Part B = 2:1
- Pre-mix Part A prior to combining with Part B, using a low speed jiffy-type mixer for 1 minute
- Mix Part A and Part B together using a low speed Jiffy-type mixer for at least 60 seconds
- Do not add solvents; product is a 100% solids epoxy
- As with all two-component systems, apply immediately after mixing, as exotherm will increase over time

Application

- Apply the mixed material with a fine nap roller, squeegee or brush
- For slip resistance, appropriate aggregate may be broadcast into wet coating and backrolled to incorporate into a single coat or broadcast aggregate to rejection between the first and second coats
- Immediately after mixing, pour the mixture onto the floor in a ribbon pattern and spread with a notched rubber squeegee
- Apply a second coat before maximum overcoat window is reached
- Product working time is 30 minutes at 77°F (25°C)
- Product working time is 20 minutes at 90°F (32°C)

Pot life

30 minutes at 77°F (25°C)

Note:

- See ADDITIONAL DATA – Pot life

PPG NOVAGUARD® 5051 Novolac Epoxy Coating

formerly known as ICO Super Guard Coating

ADDITIONAL DATA

Physical data of cured material	
Characteristic	Value
Tensile Strength (ASTM D638)	6800 psi
Tensile Elongation (ASTM D638)	6.0%
Flexural Strength (ASTM D790)	7035 psi
Water Absorption (ASTM D570)	0.2% in 24 hours
Hardness, Shore D (ASTM D2240)	83
Taber Abrasion (ASTM D1044, CS-17 Wheel, 1 kg load, 1000 cycles)	86 mg. loss
Impact Resistance (ASTM D2794) direct / indirect	80 in. lb.
Moisture Vapor Transmission (ASTM D1653)	.027 perms

Note:

- The value ranges stated in this Product Data Sheet are based on system processing under laboratory conditions. Equipment configurations and/or field application conditions may produce variances in final system values.

Curing Time	
Substrate temperature	Dry to walk on
50°F (10°C)	14 hours
77°F (25°C)	7 hours
90°F (32°C)	3.5 hours

Pot life (at application viscosity)	
Mixed product temperature	Pot life
50°F (10°C)	35 minutes
77°F (25°C)	30 minutes
90°F (32°C)	20 minutes

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.



PPG NOVAGUARD® 5051 Novolac Epoxy Coating

formerly known as ICO Super Guard Coating

REFERENCES

- Information sheet | Explanation of product data sheets
-

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.

AVAILABILITY OF PACKAGING

Packaging

- 1-gallon and 4-gallon kits
-

