



NanoSonic, Inc

PRODUCT INFORMATION

www.nanosonic.com

HybridShield® Anticorrosion Coating Mixing Instructions

Product Description

- Unique, one-part nanocomposite coating
- Topcoat guarding against corrosion
- Applicable to a variety of surfaces
- Excellent abrasion resistance
- Cures at room temperatures
- Resists high humidity

Physical Data

Finish	Gloss, Semi-gloss, Matte*
Color	Black, White, Semi-Transparent*
Parts	1
Curing Mechanism	Chemical Reaction
Number of Coats	1 or 2
Theoretical Coverage at 125μ	800 ft ² /gallon; (<i>Allow for losses due to application, surface irregularities, etc.</i>)
Shelf Life	Unopened for 6 months at temperatures < 40°C
Recommended dry film thickness	1-4 mils

****Pigment and gloss adaptations upon request.***



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Application Instructions

Refer to HybridShield Anticorrosion product data sheet for properties and use. To obtain the maximum performance for which HybridShield Anticorrosion is formulated, strict adherence to application instructions, precautions, and conditions is necessary. For conditions which are not in the within the requirements consult NanoSonic technical experts.

Surface preparation

Coating performance is proportional to degree of surface preparation.

Primed Metal/Concrete	Prepare surface in accordance with application instructions specific to selected primer. Ensure primer is dry-hard and clean of dust and debris.
Steel	Abrade surface to SSPC SP-10 or higher or consult instructions for desired primer. For unprimed, abraded surfaces, apply HybridShield Anticorrosion closely following preparation to avoid rusting. Surface should be free of moisture, oil, grease, grit, dust, and organic matter.
Galvanized Steel	Remove oil and/or soap film with detergent or emulsion cleaner. Lightly abrade surface or treat with appropriate zinc phosphate conversion coating. Consult NanoSonic technical experts for suggested cleaner or conversion coating as needed.
Existing Coatings	HybridShield Anticorrosion may be used as an over coat to a variety of tightly adhered base coats. Consult NanoSonic technical experts for specific recommendations with respect to coating over existing coatings. Preexisting coatings must be cleaned, dust free, and damaged areas addressed prior to coating with HybridShield Anticorrosion. A test patch of HybridShield Anticorrosion is recommended.
Repair to damaged surfaces	Damaged areas are to be prepared in accordance to original surface preparation. Lightly abrade surface and clean to ensure areas are free of residue, grit, and dust.



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Application Equipment

Airless Sprayer	Standard airless sprayer equipment.
Conventional/HPLV Sprayer	Standard equipment, 0.007" orifice at 80 psi flow. A moisture and oil trap in the line recommended.
Power Mixer	Standard paint shaker, or standard paint mixer powered by air or explosion proof electric motor.

Environmental Conditions

Ambient temperatures	32°F to 100°F (0°C to 38°C)
Substrate temperatures	32°F to 100°F (0°C to 38°C)
Relative humidity	40% humidity
Surface temperature	32°F to 100°F (0°C to 38°C)
General air quality	Area should be sheltered against airborne pollutants and particulates. Area should protect against alteration of spray patterns by wind. Ensure appropriate ventilation during application of coating and subsequent curing.



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Instructions for Use

Mixing ratio by volume	Mix HybridShield Anticorrosion to ensure homogeny before use.				
Post-mixing viscosity	<20 sec using a No. 4 Ford Cup				
Pot Life	<p>Pot life times are established for properly resealed containers of HybridShield Anticorrosion at 40% relative humidity. Times may be extended due to quality of storage and environment.</p> <table border="1"> <tr> <td>Temperature</td> <td>22°C</td> </tr> <tr> <td>HybridShield Anticorrosion</td> <td>2 Hours</td> </tr> </table>	Temperature	22°C	HybridShield Anticorrosion	2 Hours
Temperature	22°C				
HybridShield Anticorrosion	2 Hours				
Thinner	Consult NanoSonic technical experts for recommended thinners. If needed, thin HybridShield Anticorrosion no more than 10%.				
Cleaning Solvents	HybridShield Anticorrosion may be cleaned with acetone, isopropyl alcohol, and toluene. Select cleaner and cleaning method according the substrate/surface treatment. Consult NanoSonic technical experts as needed.				
Primers	Consult selected primer's instructions for use. Consult NanoSonic technical experts.				
Limitations for Use	For Industrial or Professional Use Only.				
Safety Precautions	This is a solvent borne coating for which inhalation of spray mist and vapor, and contact between wet coat and exposed skin and eyes should be avoided. Consult safety data sheet for further precautionary actions. For ancillary solvents, thinners, primers, and cleaners consult relevant safety data sheets and usage instructions.				



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Dry/Cure Times

HybridShield Anticorrosion at 1-4mils wft, 40% relative humidity, and 20 sec mixing with a #4 Ford cup.

	RT	65°C	90°C
Set up	1 hr	45 min	15 min
Cure	24 hr	12 hr	2 hr

Heat Curing

Allow HybridShield Anticorrosion to dry to touch prior to accelerated curing temperatures above 60°C.

Availability

- 1 quart
- 1 gallon
- 5 gallon (call for pricing)

Additional Product Information

For additional product information or specialty mixing instructions, please contact a NanoSonic sales representative:

Phone: 540.626.6266

E-mail: sales@nanosonic.com