



New Hempadur Avantguard 860: A unique combination of superior anti-corrosion protection and best-in-class application properties

Hempadur Avantguard 860 is our new activated zinc primer based on the Avantguard technology. Engineered to give you the corrosion protection you expect of an inorganic zinc silicate (IOZ) combined with the application benefits of an epoxy.

Based on our recognised activated zinc technology with superior performance, Hempadur Avantguard 860 sets a new standard in the protective coatings industry, offering applicators greater efficiencies, while providing asset owners with a best-in-class anti-corrosion solution.

Proven performance

Specify Hempadur Avantguard 860 with confidence. Our Avantguard products are trusted by our customers across the Oil & Gas, Infrastructure and Wind Power markets.

Hempadur Avantguard 860 conforms to the compositional requirements of SSPC Paint 20 2002, level 1, type II. It also meets the toughest anti-corrosive test requirements for the most severe environments, including ISO 12944 C5-M High and ISO 20340 C5-M. Coating systems based on Avantguard 860 are prequalified for NORSOK M-501 Ed. 6, System 1.

At Hempel, we understand the complex needs of our customers, and with 100 years' experience in marine and protective coatings, we offer tailored anti-corrosion solutions that make a real difference.

Global service

We give you the right products on site, on time, every time, with 150 globally based stock points. Our 28 manufacturing plants are ISO 9001 accredited, assuring you of consistent quality products, no matter where you are in the world.

Innovative solutions

Based around the world, our R&D teams are focussed on delivering improved productivity for our customers by enhancing the attributes of the products we offer. Our on-site technical service teams are on hand to ensure those benefits are realised.

Avantguard technology

Avantguard technology uses a combination of zinc, hollow glass spheres and a proprietary activator which activates the zinc and enhances its protective capabilities. Offering superior protection, Avantguard significantly reduces the effects of corrosion. This increased durability has been proven in extensive tests. Avantguard is effective using the barrier, inhibitor and galvanic methods of protection for all-round performance.

Overcome the challenges of zinc silicates

Features	Benefits
Faster drying (4x faster than IOZ)	Apply a 3-coat system in a single shift
2x better mud cracking resistance than IOZ	Reduces rework
Wide application temperature range (down to -10°C/14°F)	Global application flexibility, all year round
No restrictions on minimum relative humidity	Reduced idle time in regions with low RH
No need for a mist coat to avoid popping	Further improved productivity

Setting the new standard

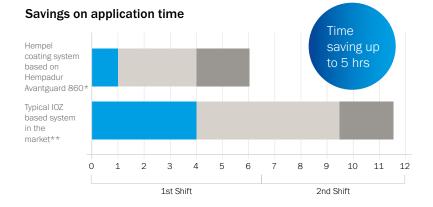
Anti-corrosion performance of Avantguard 860 against zinc silicate after 6 months of salt spray exposure (DFT = $70 \pm 10 \mu m$)



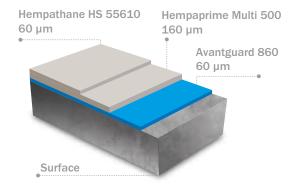


Avantguard 860

Zinc silicate



based on Hempel system Avantguard 860 / Hempaprime Multi 500 / Hempathane HS 55610
based on generic 3-coat system with fast curing IOZ as primer under optimum curing conditions (25°C/77°F and RH>50%). Increased overcoating intervals for lower temperatures/humidities



Hempadur Avantguard 860 at a glance

Superior anti-corrosive protection which is on par with zinc silicates, based on demonstrated and extensively tested Avantguard technology. Benefit from the higher throughput delivered by Avantguard 860, with consistent curing times all year-round and at temperatures down to -10°C/14°F with no restrictions on minimum relative humidity.

Be confident that you are specifying a tested and proven product with the robust track record of our proprietary Avantguard technology.

Increase your efficiency by using a product with easy application and best-in-class drying time, whether in shop or on-site.

Specifications and parameters	
Theoretical spreading rate:	11.3 m 2 /L (453 sq.ft/US gallon) 60 μ m/2.4 mils
NACE+ cracking test:	Up to 180 $\mu\text{m}/7.2$ mils
Specific gravity:	2.5 kg/L (21.3 lbs/US gallon)
Overcoating interval:	1 hour at 20°C/68°F
Surface dry:	15 minutes at 20°C/68°F
Through dry:	3 hours at 20°C/68°F
Pot life:	6 hours at 20°C/68°F
VOC:	302 g/L (2.5 lbs/US gallon)
Application equipment:	Airless spray, brush and roller

+ NACE Std. TM0304-2004, section 9: Thermal-cycling resistance test

Hempadur Avantguard 860 is the first of its class, specifically developed to overcome the problems experienced with zinc silicate primers application, without compromising corrosion protection and boosting productivity.

Since 1915 Hempel has been a world-leading coatings specialist, providing protection and inspiration to the world around us. Today we have over 5,500 people in 80 countries delivering trusted solutions in the protective, decorative, marine, container, industrial and yacht markets. This includes many recognised brands like Crown Paints, Schaepman and Jones-Blair.

Hempel is proudly owned by the Hempel Foundation, which supports cultural, humanitarian and scientific causes across the world.

Hempel A/S

Lundtoftegaardsvej 91 2800 Kgs. Lyngby Denmark

Tel: +45 4593 3800 Email: avantguard@hem