



You Build, We Protect!

NEWSLETTER

HEGGEL® Corr

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Exploring The
Unique Attributes of
HEGGEL
High-Tech Coatings

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Advanced Coating Solutions: Next-Level Innovation in Efficiency

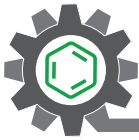
The **HEGSEL Corr** category stands out as a top choice in advanced corrosion protection coatings, showcasing three key advantages alongside the excellent chemical resistance, thermal resistance, and strong mechanical features that redefine industry's optimized protection measures.

HEGSEL Corr coatings, facilitated by their self-priming advanced composition, revolutionize the coating process by ensuring superior adhesion to various substrates, including metals and concrete. This innovation saves time and resources during application, reduces drying times, expedites the coating process, and minimizes downtime and prolonged delays for coated surfaces.

HEGSEL Corr coatings, formulated as solvent-free products, offer a cleaner and greener alternative without compromising performance or durability. Environmental sustainability is integral to **HEGSEL's** coating technology, significantly reducing volatile organic compound (VOC) emissions, ensuring a safer working environment for applicators. Despite the absence of solvents, these coatings maintain excellent flow and leveling properties, providing a smooth and uniform finish while upholding environmental responsibility.

HEGSEL Corr coatings with the single-layer application, providing exceptional corrosion resistance with just one coat, thereby decreasing material consumption and offering a cost-effective solution for corrosion prevention projects. They offer enduring protection against corrosion, even in demanding industrial environments where various corrosive elements are prevalent.





Self-Priming

The advanced **HEGSEL Corr** coatings utilized for corrosion protection provides a remarkable self-priming characteristic, a feature that distinguishes it from traditional coatings. This innovative attribute allows the coating to efficiently adhere to various surfaces without the need for a separate primer layer, streamlining the application process and saving both time and resources. By eliminating the necessity for primer application, the overall coating procedure is simplified, making it more convenient and cost-effective for industrial and commercial applications alike. This self-priming capability ensures thorough coverage and adhesion, even on challenging substrates, enhancing the durability and longevity of the protective coating system.

In coating systems that require primer during application, the choice of primer significantly influences the adhesion of the coating to the surface. Commonly used epoxy primers offer an adhesion strength ranging from 3 to 5 MPa, often falling short of meeting the necessary technical requirements. In contrast, **HEGSEL Corr** coatings possess a self-priming capability, boasting an impressive adhesion strength exceeding 30 MPa. This remarkable performance represents over a tenfold increase in adhesion strength compared to conventional coatings that rely on primers.

Furthermore, the inclusion of solvents in primers commonly leads to complexities in both the application and performance of coatings. As additional layers are introduced during the coating process, the integrity of adhesion between these layers becomes increasingly critical. Any slight deficiency in this adhesion can precipitate interlayer separation, ultimately culminating in coating failure. However, **HEGSEL Corr** coatings alleviate these concerns entirely by eliminating the necessity for primers altogether.

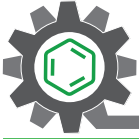
Typical Coatings

- Multi-layer application
- Cohesive breaks between layers
- ~ 3-5 MPa adhesion strength

HEGSEL Corr Coatings

- Self-Priming
- Direct application
- >30 MPa adhesion strength!

The diagram illustrates the difference in coating application and adhesion. The top section, 'Typical Coatings', shows a cross-section of a pipe with multiple layers of coating. Callouts indicate 'Multi-layer application' and 'Cohesive breaks between layers', with a resulting adhesion strength of '~ 3-5 MPa'. The bottom section, 'HEGSEL Corr Coatings', shows a cross-section of a pipe with a single, thick layer of coating. Callouts indicate 'Self-Priming' and 'Direct application', with a resulting adhesion strength of '>30 MPa adhesion strength!'.

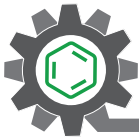


Solvent-Free



HEGGEL Corr coating's solvent-free formulations represent a pioneering innovation with significant advantages. Coatings containing solvents are typically applied in multiple layers. If proper attention is not given to the application process, there is a risk of blistering and the formation of pinholes. If the solvent is not allowed to fully evaporate before the next layer is applied, it can become trapped between layers. As the solvent escapes over time, microscopic pores may form, resulting in tiny pinholes and increased permeability in the coating.

In contrast to solvent-based coatings, **HEGGEL Corr** coatings with solvent-free chemical microstructure offer advantages that set them apart as a superior choice for corrosion protection. Their **environmentally friendly** composition reduces emissions of harmful VOCs, promoting sustainability and compliance with regulatory standards. The **HEGGEL Corr** coatings also have faster drying times, facilitating quicker turnaround for coated surfaces and minimizing disruption to ongoing operations.



Single-Layer

As previously noted, traditional multi-layer coatings, often containing solvents, frequently result in blistering and pinholes due to the meticulous layering process. In contrast, **HEGGEL Corr** coatings, applied in a single layer, significantly simplify the application procedure, effectively avoiding such destructive consequences. This unique feature reduces the chances of errors and inconsistencies, ultimately saving both time and costs. By encapsulating all necessary protective properties within a single layer, **HEGGEL Corr** coatings ensure comprehensive defense against corrosion, offering a robust shield for various surfaces exposed to harsh environmental conditions.

On the other hand, the application of multiple layers requires meticulous precision and expertise, which increases the likelihood of imperfections.

The intricate layering process also extends the application timeline, as installation intervals must be considered between layers to allow the first layer to dry before applying the coating. This time-consuming process, particularly during maintenance and overhauls, results in higher labor costs and potential delays. Each layer in a multi-layer coating system introduces the possibility of interlayer adhesion issues, diminishing the total effectiveness of corrosion protection. These drawbacks underscore the inefficiency and complexity inherent in multi-layer coatings, emphasizing the distinct advantages of the single-layer alternative.

The absence of interlayer adhesion concerns in **HEGGEL Corr** coatings eliminates potential weak points in the coating system, ensuring uniform and durable protection against corrosion, while minimizing the material usage, contributing to cost savings and environmental sustainability.

