



You Build, We Protect!

NEWSLETTER

HEGGEL® FRP 333

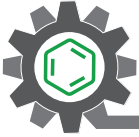
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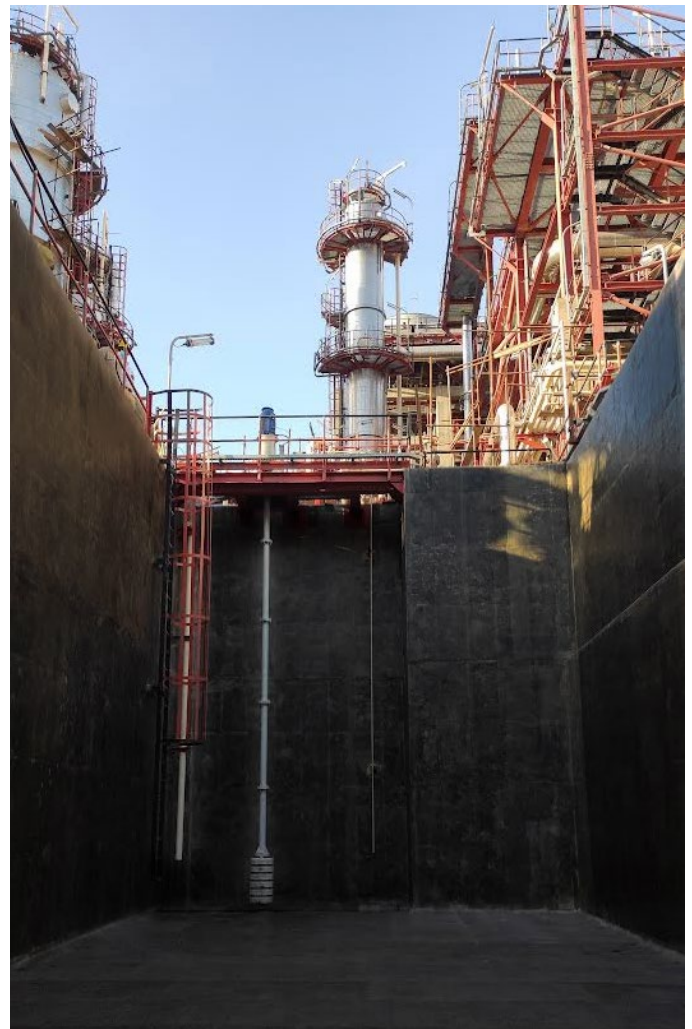
Next-Level Protection: Advanced Furan Resin Laminate

In the vast domain of heavy industries, where materials are produced and processed on an immense scale, safety emerges as a fundamental cornerstone of operational excellence. Within the complex array of hazards these industries face, the handling of corrosive chemicals demands special attention due to its profound implications on human well-being and environmental measures, and equipment integrity.

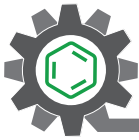
Understanding the Hazards

Corrosive chemicals can cause destruction or irreversible damage; for humans, getting exposed to these dangerous chemicals can lead to serious problems. This includes immediate harms as well as the risk of long-lasting health issues. Both workers handling these substances and individuals in surrounding communities could be affected.

Spills and leaks of corrosive substances pose severe risks that spread across environmental, health, and operational dimensions of heavy industries. Environmentally, such incidents can devastate ecosystems, leading to soil degradation, water pollution, and significant harm to wildlife, thereby disrupting the natural balance of affected areas.



Moreover, the fallout from these spills extends into the operational sphere of industries, where the immediate health and environmental repercussions are compounded by significant operational disruptions. These can manifest as halted production, cleanup costs, etc. culminating in substantial financial losses. This highlights how crucial it is to follow strict safety measures, actively prevent risks, protect against corrosion, and be ready to respond to emergencies.



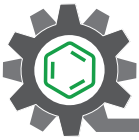
Strategies to Mitigate Risks

To lessen the dangers of spills from corrosive chemicals, a comprehensive plan is necessary, touching on everything from construction measures to corrosion protection. This includes setting up strict safety rules and regularly training employees who work with dangerous materials, so they know how to handle them safely.

Using advanced technology to spot leaks and spills as soon as they happen can also greatly lessen their harmful effects. It is crucial to have a solid plan ready for emergencies, so any spills can be quickly contained and cleaned up, minimizing damage.

To further safeguard against the hazards of corrosive chemical spills, implementing corrosion protection methods is essential, particularly through the use of protective linings. These specialized coatings are applied directly to the floors of facilities handling hazardous materials, providing a durable barrier against corrosive substances. Floor linings are designed not only to resist chemical attacks but also to prevent the permeation of substances that could weaken the structural integrity of the floor. This approach not only minimizes the risk of environmental contamination but also helps in maintaining a safe working area, free from the potential slips and falls associated with incidents.





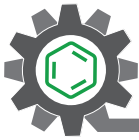
Integrating corrosion protection floor linings into our overall risk reduction plan markedly reinforces our safeguards, guaranteeing that our facilities are secure, adhere to regulations, and remain functional despite the threats posed by corrosive substances. If floorings in industrial environments remain without protective linings, they are left vulnerable to a host of damaging effects from spills of corrosive chemicals. Over time, exposure to corrosive substances can lead to significant deterioration. Without a barrier to shield them, these chemicals can penetrate the flooring material, causing it to weaken, crack, or even disintegrate. This not only compromises the structural integrity of the floor but also poses serious safety risks to personnel through increased chances of slips, trips, and falls due to uneven surfaces or the formation of hazardous pools of chemicals. Moreover, the contamination can spread, potentially impacting the environment and requiring costly decontamination and repair work. The absence of protective linings ultimately leads to accelerated wear, necessitating more frequent replacements and leading to higher maintenance costs and potential operational disruptions.

Additionally, floors without protective linings are at risk of sudden failures, which can have immediate and catastrophic consequences. For example, a chemical storage facility might experience a rapid floor collapse after its unprotected concrete is silently eroded by leaked corrosive solvents, leading to equipment

Ensuring floors are equipped with appropriate protective linings is therefore crucial to maintaining a safe, functional, and durable industrial environment.

Among the various flooring lining systems available, Furan-based laminates stand out for their superior quality and exceptional chemical resistance, surpassing both epoxy and polyurethane systems. Furan linings are especially adept at withstanding a wide array of corrosive chemicals, including sulfuric acid, hydrochloric acid, caustic solutions, and corrosive solvents.





This makes them an ideal choice for environments where the floorings are not subjected to excessive mechanical stresses. Unlike other lining materials that might degrade or fail under the harsh assault of these chemicals, Furan FRP linings maintain their integrity, offering durable protection against the destructive consequences of such spills. Their robust resistance to a broad spectrum of corrosive agents ensures that floors remain safe and intact, safeguarding the facility's structural health and ensuring continuous operational safety. This unique combination of durability and chemical resistance positions Furan-based systems as the preferred choice for protecting industrial flooring from the challenges posed by corrosive spills.

HEGSEL FRP 333, high-tech glass mat reinforced furan lining system, sets a high standard for flooring protection in industrial settings, thanks to its impermeable design that effectively blocks the penetration of harsh chemicals. This cutting-edge flooring solution is engineered to withstand exposure to a multitude of chemicals, offering unparalleled resilience and durability. Its unique composition ensures that even the most aggressive substances cannot breach its defenses, maintaining the integrity of the flooring system under various challenging conditions. The seamless nature of **HEGSEL FRP 333** not only simplifies cleaning and maintenance but also eliminates weak points where chemicals could potentially infiltrate, making it an ideal choice for facilities requiring robust chemical protection.





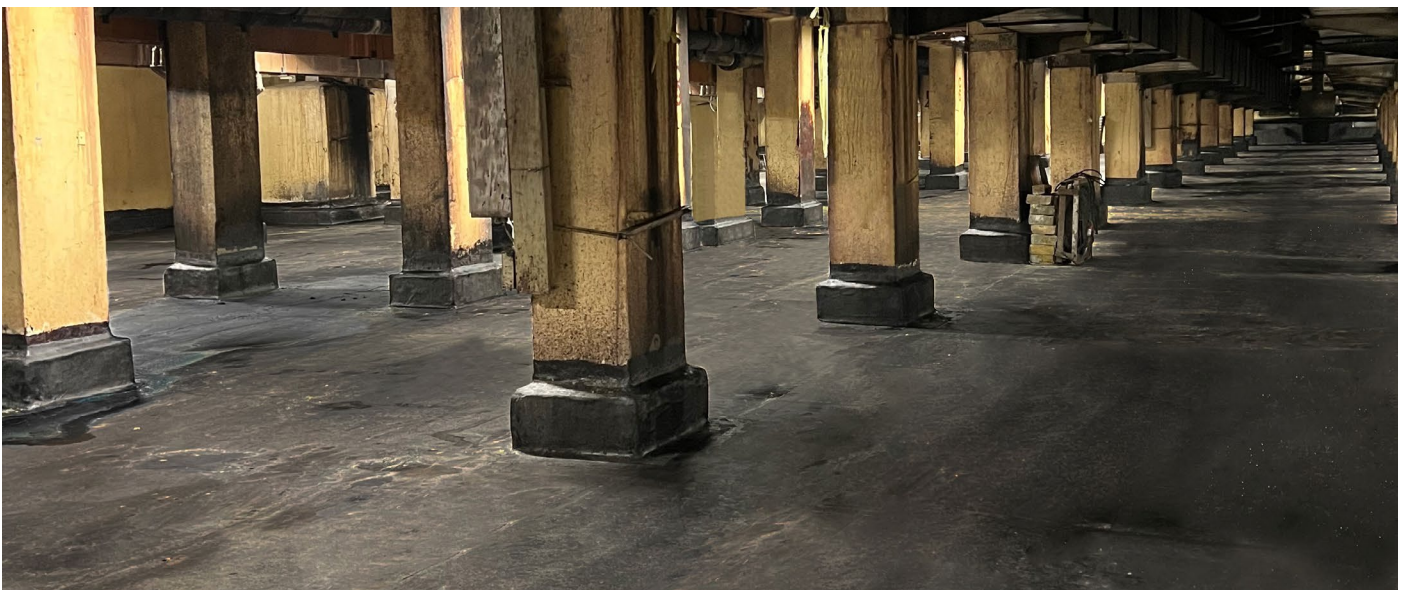
◆ Glass Mat Reinforced Furan Lining System

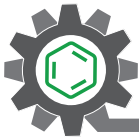
HEGSEL FRP 333 introduces a groundbreaking approach to protective flooring. This exceptional product is crafted from high-performance furan resin, reinforced by glass mat that enhances durability, chemical resistance and mechanical features. Moreover, **HEGSEL FRP 333** incorporates a hybrid mat to achieve electrical conductivity, offering an added layer of safety and utility in environments where static discharge could pose a risk. This combination of features makes **HEGSEL FRP 333** a superior choice for facilities seeking comprehensive protection against a wide range of chemical threats while ensuring a safe, conductive surface.

HEGSEL FRP 333 emerges as a standout solution in the industry with its universal chemical resistance, particularly excelling in environments where exposure to a wide range of acids and solvents is a common concern.

This innovative lining system is engineered to withstand the aggressive nature of these substances, providing unparalleled protection to floorings in petrochemical plants, chemical manufacturing units, storage areas sumps, ponds, etc. and other high-risk areas. Its ability to resist a wide spectrum of chemicals ensures that the integrity of the flooring is maintained, safeguarding the infrastructure against the potential damages and costly repairs that can result from chemical spills and exposures. This feature not only enhances the longevity of industrial flooring but also contributes to a safer working environment for personnel.

In addition to its exceptional chemical resistance, **HEGSEL FRP 333** boasts high temperature resistance, capable of enduring temperatures up to +100°C in dry conditions. This makes it an ideal solution for areas subjected to extreme heat, further broadening its applicability across various industrial sectors.





HEGGEL FRP 333 exhibits outstanding adhesion characteristics to the substrates, making it a highly valued choice for applications requiring robust and durable bonding. Its formulation is designed to penetrate deeply into microscopic pores and irregularities of the substrate, ensuring a strong mechanical interlock and chemical bond. The enhanced bond strength of **HEGGEL FRP 333** minimizes the risk of delamination and ensures long-lasting performance.

The very good storage stability of **HEGGEL FRP 333** is another testament to its superior design, ensuring that it remains effective over time without degradation in quality or performance.

Together, these attributes position **HEGGEL FRP 333** as a versatile and reliable choice for protecting industrial floorings from a multitude of threats.

Technical Data	Value	Unit
Adhesion Strength (Concrete / Screed) DIN EN ISO 4624	>Inherent tensile strength	MPa
Adhesion Strength (Steel) DIN EN ISO 4624	>2	MPa
Electrical leakage Resistance (When using HEGGEL Hybrid Fleece) DIN EN 14879-3 at a relative humidity of > 70 %	$\leq 1 \times 10^6$	Ω
Max. Operating Temperature Dry concrete / Steel	+60 / +100	°C
Hardness Shore D DIN 53505	>60	—