

PRODUCT DATA SHEET

Sika® FerroGard®-901 S

Corrosion inhibiting concrete admixture

PRODUCT DESCRIPTION

Sika® FerroGard®-901 S is a liquid concrete admixture based on Sika® FerroGard® technology for use in reinforced concrete and mortar. It acts as a corrosion inhibitor for the steel reinforcement. By using Sika® FerroGard®-901 S, the life expectancy and durability of reinforced concrete can be substantially increased.

USES

Sika® FerroGard®-901 S is designed for reinforced concrete at risk of corrosion. It specifically provides protection from chloride-induced corrosion.

Typical applications:

- Concrete roads
- Bridges
- Tunnels
- Retaining walls
- Industrial plants
- Multi storey car parks

CHARACTERISTICS / ADVANTAGES

Sika® FerroGard®-901 S reduces both the anodic and cathodic reactions of the electrochemical corrosion process. The product forms a protective layer on the steel surface which delays the onset of corrosion and also reduces the corrosion rate. Advantages include:

- Corrosion protection for embedded reinforcing steel, especially from chloride attack
- Protection from the destructive influences of reinforcement corrosion
- No negative influences on the properties of both the fresh and the hardened concrete

Sika® FerroGard®-901 S is neutral to hydrogen embrittlement of prestressed steel i.e. it neither enhances nor limits hydrogen embrittlement of prestressing steel.

PRODUCT INFORMATION

Chemical Base	Amino alcohols
Packaging	1000 L IBC
Shelf Life	12 months shelf life from date of production if stored properly in undamaged, unopened, original sealed packaging.
Storage Conditions	Storage at temperatures between +5°C and +30 °C. Protect from direct sun-light, frost and contamination.
Appearance / Colour	Green liquid
Density	1.05 kg/L
pH-Value	9.5 at +20 °C
Total Chloride Ion Content	<0.10 % w/w (chloride free)
Equivalent Sodium Oxide	<0.55 % w/w (alkali content) <0.10 % w/w (SO ₃ sulphate content)

TECHNICAL INFORMATION

Concreting guidance	The standard rules of good concreting practice, concerning production and placing, are to be followed. Laboratory trials shall be carried out before concreting on site, especially when using a new mix design or producing new concrete components. Fresh concrete must be cured properly and curing applied as early as possible.
Specific Advice	Sika® FerroGard®-901 S has been shown to reduce the Integral Corrosion Current at propagation stage by a factor of 2.9 at 3% dosage by weight of cement, when compared to a reference concrete at 400 days.

APPLICATION INFORMATION

Recommended Dosage	12 kg/m ³
Dispensing	Sika® FerroGard®-901 S is mixed with the gauging water or added at the same time into the concrete mixer. It may also be added to the concrete mixer at the point of discharge. In this case, an additional mixing time of at least 1 minute per m ³ concrete must be observed. The quantity of Sika® FerroGard®-901 S in the mix design should be taken into consideration when determining the quantity of water for a specific w/c-ratio.
Compatibility	Sika® FerroGard®-901 S can be combined with most other Sika products; specific compatibility information available on request.

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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