

**BUILDING TRUST** 

# PRODUCT DATA SHEET Sika<sup>®</sup> FerroGard<sup>®</sup>-901 S

### CORROSION INHIBITING CONCRETE ADMIXTURE

#### **PRODUCT DESCRIPTION**

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

#### USES

Sika® FerroGard®-901 S is designed for reinforced concrete particularly at risk of corrosion. It specifically provides protection from chloride-induced corrosion. Typical uses are in:

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

# **CHARACTERISTICS / ADVANTAGES**

By using Sika<sup>®</sup> FerroGard<sup>®</sup>-901 S both the anodic and cathodic reactions of the electrochemical corrosion process are reduced. The product forms a protective layer on the steel surface which delays the onset of corrosion and also reduces the corrosion rate. Sika<sup>®</sup> FerroGard<sup>®</sup>-901 S is a combination of organic corrosion inhibitors.

The following advantages can be achieved using Sika<sup>®</sup> FerroGard<sup>®</sup>-901 S:

- 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<sup>®</sup> FerroGard<sup>®</sup>-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	200 litre drum and 1000 litre IBC
Appearance / Colour	Green liquid
Shelf Life	12 months shelf life from date of production if stored properly in undam- aged, unopened, original sealed packaging.
Storage Conditions	Storage at temperatures between +5°C and +30 °C. Protect from direct sun- light, frost and contamination.
Density	~1.05 kg/L
pH-Value	~9.5 at +20 °C

Product Data Sheet Sika® FerroGard®-901 S June 2019, Version 01.01 021403051000000011

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 pos- sible.
Specific Advice	Frozen Sika <sup>®</sup> FerroGard <sup>®</sup> -901 S can be used after slow thawing at room temperature, followed by intense stirring.

#### **APPLICATION INFORMATION**

Recommended Dosage	12 kg/m <sup>3</sup>
Compatibility	Sika® FerroGard®-901 S can be combined with many other Sika products. Note: Always conduct trials before combining products in specific mixes and con- tact Sika® technical service for more information and advice.
Dispensing	Sika <sup>®</sup> FerroGard <sup>®</sup> -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 in the transit mixer at the point of discharge. In this case, an additional mix- ing time of at least 1 minute per m <sup>3</sup> concrete must be observed. Before dis- charging it, check the concrete visually for uniform consistency. The quantity of Sika <sup>®</sup> FerroGard <sup>®</sup> -901 S in the mix design should be taken into consideration when determining the quantity of water for a specific w/c-ratio.
Restrictions	Sika <sup>®</sup> FerroGard <sup>®</sup> -901 S shall not be added to dry cement.

# VALUE BASE

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

# LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## **ECOLOGY, HEALTH AND SAFETY**

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

# **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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#### SIKA IRELAND LIMITED

Ballymun Industrial Estate Ballymun Dublin 11, Ireland Tel: +353 1 862 0709 Web: www.sika.ie Twitter: @Sikalreland



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