

# Sika Ferrogard® -901

## Corrosion Inhibiting Concrete Admixture

<b>Product Description</b>	Sika Ferrogard® -901 is a liquid concrete admixture based on Sika Ferrogard Technology for use in reinforced concrete and mortar. It acts as corrosion protection for the steel reinforcement. By using Sika Ferrogard® -901 the life expectancy and durability will be substantially increased.
<b>Uses</b>	<p>Sika Ferrogard® -901 is designed for reinforced concrete particularly at risk of corrosion. It specifically provides protection from chloride induced corrosion.</p> <p>Typical uses are in:</p> <ul style="list-style-type: none"><li>■ Concrete roads</li><li>■ Bridges</li><li>■ Tunnels</li><li>■ Retaining walls</li><li>■ Industrial plants</li><li>■ Multi storey car parks</li></ul>
<b>Advantages</b>	<p>By using Sika Ferrogard® -901 both the anodic and cathodic reactions of the electrochemical corrosion process are being reduced. The product forms a film on the steel surface which delays the onset of corrosion and also reduces the rate of corrosion.</p> <p>Sika Ferrogard® -901 is a combination of organic corrosion inhibitors.</p> <p>The following advantages can be achieved by using Sika Ferrogard® -901:</p> <ul style="list-style-type: none"><li>■ Corrosion protection for embedded reinforcing steel, especially from chloride attack.</li><li>■ Protection from the destructive influences of reinforcement corrosion.</li><li>■ No negative influence on the properties of both fresh and hardened concrete.</li></ul> <p>Sika Ferrogard® -901 is neutral to hydrogen embrittlement of prestressed steel i.e. it neither enhances nor limits hydrogen embrittlement of prestressing steel.</p>
<b>Technical Data</b>	
<b>Base</b>	Nitrogen containing organic and inorganic substances.
<b>Appearance / Colour</b>	Green liquid
<b>Density</b>	1.06 kg/l
<b>Ph Value</b>	10 ± 1
<b>Packaging</b>	5 and 20 kg pails 200 kg drums Bulk Tanks packing available upon request
<b>Storage Conditions / Shelf life</b>	12 months from date of production if stored properly in unopened and undamaged, original sealed containers, at temperatures between +1°C and +35°C. Protected from direct sunlight and frost.



## Application

<b>Dosage</b>	Recommended dosage: 12 kg/m <sup>3</sup> concrete.
<b>Addition</b>	<p>Sika Ferrogard® -901 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 mixing time of at least 1minute per m<sup>3</sup> concrete must be observed. Before discharging it, check the concrete visually for uniform consistency.</p> <p>The quantity of Sika Ferrogard® -901 in the mix design should be taken into consideration when determining the quantity of water for a specific W/C ratio.</p> <p>Sika Ferrogard® -901 is not to be mixed with the dry cement.</p>

<b>Concrete placing</b>	When using Sika Ferrogard® -901, high quality concrete is normally being produced. General rules of good concrete manufacturing and placing practice must be observed. Correct curing of the concrete must also be carried out.
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<b>Compatibility</b>	<p>Sika Ferrogard® -901 may be combined with the following Sika® products:</p> <ul style="list-style-type: none"> <li>■ Sikament® super plasticisers.</li> <li>■ Sika Fro® -V5-A.</li> <li>■ Silicafume based products of the Sikacrete®/Sikafume® types.</li> <li>■ Sika Retarder® and Sika Retardol® -25.</li> </ul> <p>Pre-trials are always recommended for these high performance concrete mix designs to confirm the desired application and performance characteristics etc.</p>
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<b>Important Notes</b>	<p>Frozen Sika Ferrogard® -901 may be used again after slow thawing at room temperatures and intensive stirring.</p> <p>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.</p>
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## Safety Instructions

<b>Safety Precautions</b>	<p>Wear goggles and rubber gloves.</p> <p>In contact with skin wash with soap water.</p> <p>In contact with eyes or mucous membrane flush immediately with plenty of warm water and seek medical attention without delay.</p>
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<b>Ecology</b>	Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.
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<b>Transport</b>	Non-hazardous.
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<b>Toxicity</b>	Non-toxic under relevant health and safety codes.
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<b>Legal notes</b>	<p>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.</p>
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