

Corrosion Inhibitor

GENERAL INFORMATION

NALZIN® FA 179 is recommended as a corrosion inhibitor for aqueous paint systems to counteract the formation of flash-rust. The product is also recommended for application as an inhibitor against the formation of can-corrosion. Emulsified in water, NALZIN® FA 179 can also be used as a temporary rust inhibitor.

PHYSICAL PROPERTIES

Appearance	: clear liquid
pH, 5% solution in water (ASTM D 1172)	: 8.0 – 9.0
Density, 20°C (DIN 53217/3)	: approx. 1080 kg/m ³
Viscosity, 20°C (ASTM D 2196)	: max. 250 mPa.s
Color	: max. 12 Gardner
Solubility	: dispersible in water
Flashpoint (ASTM D 65)	: > 62° C
Composition	: complex Zinc compound in a mixture of solvents

APPLICATION AND PROPERTIES

NALZIN® FA 179 can be applied to various types of water-dilutable paint systems e.g., to water-dilutable alkyd systems, -acrylics, -epoxy and dispersion paints. NALZIN® FA 179 counteracts the formation of flash-rust, that is to say, the formation of rust that develops during the drying of aqueous paint systems on ferruginous substrates.

NALZIN® FA 179 has a positive influence on the rust resisting power of the dry paint layer and counteracts can-corrosion during storage.

NALZIN® FA 179 is also used as a temporary rust inhibitor for metal surfaces. For this application, it is recommended to spray the metal surface with a 2% NALZIN® FA 179 emulsion. This method is also recommended in those cases where NALZIN® FA 179 is not used in the paint; early rusting after paint application will be avoided.

Feature

- Based on an organic zinc complex and a low nitrite addition
- Although waterdispersible, changes during the drying stage to a non-water dispersible or soluble zinc compound

Consequence

- Shows strong affinity to iron substrates to prevent flash-rusting
- decreased water sensitivity
- forms an anionic passivation layer that provides corrosion inhibition after the film has dried
- can be utilized as an in-can rust inhibitor
- improved weathering

DOSAGE

To fight flash-rusting, NALZIN® FA 179 should be added during the final stage of the paint manufacture, at a concentration of 0.1 – 0.5% calculated on the total amount of paint.

To counteract can-corrosion, NALZIN® FA 179 gives good results at a concentration of 0.1 – 0.3%

HANDLING AND SAFETY

More detailed information on handling and safety for each product is included in the relevant material safety data sheet, available for each product.

QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 certificate, which guarantees that all operations are conducted according to the stipulated standards.

The information in this publication is intended to serve as guide but is not necessarily complete and is given without warranty. We recommend all users to determine the suitability of our products for their intended uses and caution them to comply with statutory obligations and to avoid infringing rights of third parties. We encourage users to contact us to discuss problems involving our products in order to facilitate their use.

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