

NALZIN® FA 179

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 in-can corrosion. Emulsified in water, **NALZIN FA 179** can also be used as a temporary rust inhibitor.

CHEMICAL & PHYSICAL PROPERTIES

Appearance	clear-slightly hazy
pH, 5 % solution in water (ASTM D 1172)	8.0 - 9.0
Density, 20 °C (ISO 2811-2)	approx. 1080 kg/m ³
Viscosity, 20 °C (ASTM D 2196)	max. 250 mPa.s
Solubility	dispersable in water
Flashpoint (ASTM D 65)	> 62 °C
Composition	complex zinc compound in a mixture of solvents

These are typical properties not to be used for specification purposes.

APPLICATIONS

- **NALZIN FA 179** can be applied to various types of water-dilutable paint systems, e.g. to water-dilutable alkyds, -acrylics, -epoxies 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 iron-containing substrates.
- **NALZIN FA 179** has a positive influence on the rust resisting power of the dry paint layer and counteracts in-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 for those cases when **NALZIN FA 179** is not used in the paint. Early rusting after paint application will then be avoided.

KEY PROPERTIES

FEATURE	CONSEQUENCE
• Based on an organic zinc complex with a low nitrite addition	- Shows strong affinity to iron substrates to prevent flash-rusting
• Although waterdispersible, changes during the sensitivity drying stage to a non-water dispersible, in-soluble zinc compound	- decreased water sensitivity - forms an anionic passivated layer that provides corrosion inhibition after the film has dried
	- can be utilized as an in-can rust inhibitor
	- improved weathering

LEVELS OF USE

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 in-can corrosion, **NALZIN FA 179** gives good results if the concentration is further raised by 0.1 - 0.3%.

HEALTH AND SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

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SHELF LIFE

NALZIN FA 179 has a shelf life of 3 (three) years from date of manufacture.

QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 / ISO 9002 certificates, which guarantees that all operations are conducted according to the stipulated standards.

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