

NALZIN® 2

Anti-Corrosive Additive for Solvent and Water-Borne Systems

GENERAL INFORMATION

NALZIN 2, a zinc hydroxy phosphite, is a modern non-toxic anti-corrosive additive suitable for aqueous and solvent-borne paints alike.

Manufactured by a patented process, **NALZIN 2** has excellent corrosion-inhibiting properties and is cost-effective.

CHEMICAL & PHYSICAL PROPERTIES

Composition	zinc hydroxy phosphite
Color / Form	white, low (equal to
	magnesium silicate)
Special gravity	3.96 g / cm ³
Oil absorption	15 - 20 g / 100 g
Particle size, median	2 - 3 microns
pH, 2% slurry	6.5 - 7.5
Water solubility	0.004 g / 100 ml
Tinting strength	

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

APPLICATIONS

- · Industrial and maintenance paints
- Trade sales paints
- Primers
- Automotive refinish primers
- Performs well in alkyds, oil/alkyds, epoxies, chlorinated rubber and acrylic and styrene-acrylic lattices

KEY PROPERTIES

- Is non-toxic
- Has high corrosion-inhibiting activity
- Because of its low water solubility, gives both long-term protection and stability
- Has small particle size and allows fine grind and high gloss to be achieved
- Gives formulating flexibility due to its lower oil absorption
- Being a white additive with low tint strength, permits formulation of any colour
- · Minimises tendency of latex paints to flash rust
- Deagglomerates easily for rapid and clean dispersion

- Is suitable for primers, intermediate and top coatings
- Has low water and dispersants demand
- Is cost-effective

INCORPORATION

Normal formulating techniques can be followed when using **NALZIN 2**.

A Hegman reading of 5-6 is easily achieved using a high-speed disperser. Coatings with $15\mu m$ fineness of grind are readily prepared using a sand mill or other high-shear mills.

If changing from a high-oil-absorption pigment to **NALZIN 2**, the solids concentration in the mill-base should be increased for optimum dispersion.

As **NALZIN 2** is a basic pigment, resins with high acid number (above 20 measured by ASTM D 163-70) should be avoided.

When formulating latex systems, make sure the pH is in the proper range. Sufficient dispersion and wetting agent should be used for proper dispersion and stability; avoid excessive levels that can reduce anti-corrosive performance. As with all latex protective coatings, best results are obtained if the PVC is kept below 35 %, due to the lower binding power of latex.

LEVELS OF USE

The level of **NALZIN 2** anti-corrosive additive to be used depends on the degree of corrosion protection desired and on the resin system in which the pigment is used.

For light-duty maintenance, trade sales and one-coat industrial finishes, 5 to 10 % by weight is typical.

A loading of 10 to 20 % is suitable for medium-duty solvent-borne maintenance paints and for water-borne systems. For heavy-duty coatings with maximum durability, up to 40 % can be incorporated.

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.



NALZIN® 2

STORAGE RECOMMENDATIONS

Stored in a cool, dry location.

SHELF LIFE

NALZIN 2 has a shelf life of 4 (four) years from date of manufacture.

QUALITY ASSURANCE

Quality system at the site manufacturing this product complies with and is certified to ISO 9001 quality standards.

NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.

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