

Nipacide[®] CFX 3-IN

In-can Biocide for the preservation of industrial water-based products

Composition

Combination of 5 - Chloro - 2 - methyl - isothiazolin - 3 - one (CIT) / 2 - Methyl - isothiazolin - 3 - one (MIT) and 1,6 - dihydroxy - 2,5 - dioxahexane.

Description

Nipacide CFX 3-IN is a water based, liquid biocide specifically developed for the complete in-can microbiological protection of industrial water based products against bacterial and fungal spoilage in the wet state.

Product properties*

Active content

CIT / MIT : 0.8 - 1.0%.

1,6-dihydroxy-2,5-dioxahexane: 9.0 – 12.0%

Appearance

Colourless to Yellow, clear liquid

pH (neat)

2.0 – 4.0

Specific Gravity at 20°C

1.020 – 1.100

Solubility in water

Soluble

Applications

Nipacide CFX 3-IN is recommended for the preservation of a wide range of applications including water based adhesives, polymer emulsions, water based decorative paints, metal working fluids, sealants and tile grouts, household detergent cleaners, car care products and construction chemicals where protection against fungi and bacteria is required in the wet state. It is effective against a wide range of common spoilage organisms including gram positive and gram negative bacteria, yeast and fungi. It can be used over a pH range 4 - 9 and temperature range up to 40°C. Nipacide CFX 3-IN is particularly effective at providing head space protection, in-can, by the slow release of formaldehyde.

® = Registered trademark

* = These characteristics are for guidance only and are not to be taken as product specifications. The tolerances are given in the product specification sheet. For further product properties, specifications, safety and ecological data, please refer to the MSDS.

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Microbiological Data

Nipacide CFX 3-IN exhibits a broad spectrum of activity which is demonstrated by the following MIC data against some common microorganisms associated with wet-state spoilage:

<u>Organism</u>	<u>MIC (ppm)</u>	<u>Organism</u>	<u>MIC (ppm)</u>
Bacteria:		Fungi:	
<i>Pseudomonas aeruginosa</i>	400	<i>Aspergillus niger</i>	150
<i>Pseudomonas putida</i>	400	<i>Penicillium mineoluteum</i>	75
<i>Proteus vulgaris</i>	125	<i>Fusarium solani</i>	125
<i>Escherichia coli</i>	500	<i>Geotrichum candidum</i>	200
<i>Staphylococcus aureus</i>	550	Yeast:	
		<i>Candida albicans</i>	150

Chemical Compatibility

Nipacide CFX 3-IN is compatible with most raw materials used in the manufacture of industrial and decorative coatings. However it is recommended that the compatibility of Nipacide CFX 3-IN with the application should always be checked and evaluated before use.

Use Levels

Nipacide CFX 3-IN should be evaluated in finished products at levels between 0.1% and 0.3%. Please note that Nipacide CFX 3-IN above 0.16% requires R43 (causes sensitization by skin contact) hazard labeling. The level of protection required will depend on many factors including the degree of contamination of raw materials and the susceptibility of the final product.

Clariant Technical Service

Clariant technical service staff is available to assist customers in the determination of the optimum use level of biocide required to fully protect their product. The staff is on hand at all times to assist customers with all technical enquiries relating to product protection. Full microbiological efficacy testing is available at the Clariant Microbiology Laboratory.

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This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. It should not therefore be construed as guaranteeing specific properties of the products described on their suitability for a particular application. Any existing industrial property rights must be observed. The quality of our products is guaranteed under our General Conditions of Sale. Customers should ensure that their use of the products comply with specific regulations in the relevant market.