# **Product Fact Sheet**



# **NIPACIDE CFX 3-IN®**

## Wet-State Preservative for industrial water based products.

#### CLARIANT INDIA LIMITED

Reliable Tech Park, Gut No. 31, Village Elthan, Thane - Belapur Road, Airoli, Navi Mumbai 400 708 Maharashtra, India

# BUSINESS UNIT INDUSTRIAL & CONSUMER SPECIALTIES

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#### COMPOSITION

Aqueous solution of 5-Chloro-2-methyl-isothiazolin-3-one (CMIT) + 2-Methyl-isothiazolin-3-one (MIT) and 1,6 - dihydroxy - 2,5 - dioxahexane

Appearance

Colourless to Yellow Clear Liquid

CMIT + MIT : 0.80 - 1.00%

1,6 - dihydroxy - 2,5 - dioxahexane:
approx. 9.50%

pH (as such)

2.00 - 4.00

Specific Gravity (at 20°C)

1.020 - 1.100

### **Solubility**

Soluble in Water.

#### Storage stability

365 Days under recommended storage conditions in sealed original containers.

#### **Description**

Nipacide CFX 3-IN is a water based biocide based on a combination of isothiazolinones and formaldehyde donor for the complete in-can and head space microbiological protection of industrial water based products against bacterial and fungal spoilage in the wet state. It demonstrates a broad spectrum of activity with fast action against microbial contamination in various applications.

#### **Application**

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, pigment slurries, metal working fluids, sealants and tile grouts, household products, printing inks, 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 (short period up to 60°C). Nipacide CFX 3-IN is particularly effective at providing head space protection, in-can, by the controlled release of formaldehyde.

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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 information on product properties, toxicological, ecological and safety data, please refer to the safety data sheet.



#### **Use Levels**

Nipacide CFX 3-IN should be evaluated in finished products at levels between 0.1% and 0.4% based on the total weight of the finished product.

The dosage required to adequately preserve the product depends on various factors including the nature and susceptibility of the product to microbial degradation, initial microbial content in the product, processing and storage conditions. It is recommended to conduct trials for new applications to access the performance of the biocide in the product in terms of stability, compatibility and biological effectiveness.

#### **Incorporation**

Nipacide CFX 3-IN is easy to incorporate into water based systems. It is recommended to add a small dosage of Nipacide CFX 3-IN at the start of the process to combat any microbial contamination of the raw materials and process waters and to ensure process hygiene. If elevated temperatures or highly alkaline pH values are likely to occur during processing, it is recommended that Nipacide CFX 3-IN be added after these production steps. It should be blended efficiently into the formulation to ensure optimum dispersion and performance.

### **Microbiological Data**

Nipacide CFX 3-IN exhibits a broad spectrum of activity against a wide range of bacteria and fungi, which includes the following species commonly associated with wet-state spoilage:

Bacteria: Fungi:

Pseudomonas aeruginosa Aspergillus niger
Pseudomonas putida Penicillium mineoluteum
Proteus vulgaris Fusarium solani
Escherichia coli Geotrichum candidum

Staphylococcus aureus Yeast:

Candida albicans

#### **Chemical Compatibility**

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

#### **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 to assist customers with all technical enquiries relating to product protection. Full microbiological efficacy testing is available at the Clariant Microbiology Laboratory including wet-state and dry-film challenge tests, post-treatment of contaminated products, modified diffusion tests and plant hygiene audits at customers' production facilities.

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### **Regulatory Support**

Various regulations may be applicable to our products and their possible applications to safeguard human and environmental health. These regulations may vary depending on factors like end use, country or region of use, components of products, etc. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. We have a dedicated function, Product Stewardship-India, to take care of regulatory aspects of the products marketed by Clariant-India. You are requested to kindly check with us concerning compliance of our products with respect to various regulations.

# Use biocides safely. Always read the label and product information before use.

This information corresponds to the present state of our knowledge and is intended as a general description of our products and their possible applications. Clariant makes no warranties, express or implied, as to the information's accuracy, adequacy, sufficiency or freedom from defect and assumes no liability in connection with any use of this information. Any user of this product is responsible for determining the suitability of Clariant's products for its particular application. Nothing included in this information waives any of Clariant's General Terms and Conditions of Sale, which control unless it agrees otherwise in writing. Any existing intellectual/industrial property rights must be observed. Due to possible changes in our products and applicable national and international regulations and laws, the status of our products could change. Material Safety Data Sheets providing safety precautions, that should be observed when handling or storing Clariant products, are available upon request and are provided in compliance with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Clariant.

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