



## Technical Data

# Nipacide CI 15

### General Description

Nipacide CI 15 is a low toxicity biocide specifically developed for the complete microbiological protection of water based products against bacterial and fungal spoilage in the wet state, particularly where it is to be used at high ambient temperatures. Nipacide CI 15 is a water based liquid.

### Composition

Nipacide CI 15 is one of a comprehensive range of biocides manufactured by Clariant UK Ltd. and is described chemically as a blend of chlorinated and non-chlorinated isothiazolinones.

### Typical Properties

Nipacide CI 15 has the following typical properties:

Property	Analysis
Appearance:	Clear, Yellow Liquid
pH:	7.5 (@ 0.1% in water)
Solubility:	Miscible
<i>Water</i>	
<i>Oil</i>	No
Stability:	Stable
<i>Light</i>	
<i>pH range</i>	4-9

*It should be noted that the above typical properties do not constitute a specification.*

### Biocidal Properties

Nipacide CI 15 is effective against bacteria, fungi and yeast.

### Applications

Nipacide CI 15 is recommended for a wide range of applications including adhesives, polymer emulsions, fountain solutions, MWF and paint where protection against fungi and bacteria is required in the wet state.

### Use Level

The recommended use level of Nipacide CI 15 to preserve most product types is normally in the range 0.1-0.3% based on the total weight of the finished product.

**MIC Levels**

Nipacide CI 15 has a broad spectrum of activity which includes the following common spoilage organisms;

<b>Organism</b>	<b>MIC (ppm)</b>
<b>Bacteria:</b>	
<i>Pseudomonas aeruginosa</i>	400
<i>Pseudomonas putida</i>	250
<i>Proteus vulgaris</i>	900
<i>Escherichia coli</i>	700
<i>Staphylococcus aureus</i>	1100
<b>Fungi:</b>	
<i>Aspergillus niger</i>	150
<i>Penicillium mineoluteum</i>	150
<i>Fusarium solani</i>	150
<i>Geotrichum candidum</i>	300
<b>Yeast:</b>	
<i>Candida albicans</i>	50

**Compatibility**

Nipacide CI 15 is compatible with most raw materials used in microbiologically susceptible products. Compatibility of Nipacide CI 15 with the application should always be checked before use.

**Laboratory Service**

The Clariant UK Technical laboratories are available to assist in the determination of the optimum use level required in a specific product. This service may be of particular use where the product is known to be susceptible to microbiological contamination or that the environmental conditions of the production plant or use application are known to enhance contamination.

**Storage Conditions and Containers****Storage Conditions**

Nipacide CI 15 should be stored at temperatures within the range 4-40°C. Containers containing Nipacide CI 15 should not be exposed to direct sunlight. Storage conditions should also be in conformance with applicable legal, fire and insurance regulations.

**Shelf Life**

Under correct storage conditions the normal shelf life for this product is 12 months.

**Containers**

Nipacide CI 15 is available in 25kg Kegs, 200kg Drums and 1 Tonne IBC containers.

**Container disposal**

Prior to disposal, residual contents of containers of Nipacide CI 15 should be drained into the product to be preserved. It is likely, however, that a small quantity of Nipacide CI 15 will remain in the container and this should be deactivated and drained to waste. To ensure that containers are not reused, they should be pierced before disposal.

**Handling**

Where direct handling is necessitated, personnel should always wear protective clothing. This will include a rubber apron, suitable impervious full-length gloves and footwear. Protective chemical splash goggles should also be worn. For further details please refer to the Clariant UK 'Recommendations for the handling of biocides'.

**Ecotoxicity**

Nipacide CI 15 is biodegradable when diluted below the minimum inhibitory concentration and does not bioaccumulate.

**Toxicology**

Nipacide CI 15 toxicology is as follows:

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Acute Oral LD <sub>50</sub> (rat):	3965mg/kg
Sensitisation:	Components are known sensitisers
Classification:	The mixture is irritant

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**First Aid**

Should Nipacide CI 15 be mishandled the following procedures are recommended:

Inhalation	Move the exposed person to fresh air at once. Seek prompt medical attention.
Ingestion	Rinse mouth thoroughly with water. Seek medical attention.
Skin Contact	Promptly wash contaminated area with plenty of water. Seek medical attention.
Eye Contact	Promptly wash eyes with water. Seek medical attention.

*Note: For full details on first aid measures please see the Material Safety Data Sheet.*

**Transport**

The original containers should always be used for safe storage and transport. Should it be necessary to transfer to alternative containers please contact Clariant UK Ltd..

**Spillage/Disposal**

Spillages of Nipacide CI 15 should be absorbed using an inert material such as vermiculite and transferred to containers for disposal. Spillages should be disposed through specialist disposal contractors and according to local regulations.

**Fire/Explosion**

Nipacide CI 15 is non-flammable and non-explosive.

**Other Relevant Information****Regulations:**

FDA21 CFR 175.105 Preservative for polymer emulsions used in adhesives.

FDA21 CFR 176.170 Preservative for polymer emulsions used for manufacture of paper in contact with food.

FDA21 CFR 176.180 Preservative for polymer emulsions used for manufacture of paper in contact with food.

FDA 21CFR 176.300 Slimicide for manufacture of paper used in food contact applications.

BGVV Rec. XIV Preservative for polymer emulsions in food contact applications.

BGVV Rec. XXXVI Slimicide for manufacture of paper used in food contact applications.

**WGK Classification:****Other:**

*All information is given in good faith but without warranty. Customers should ensure that their use of the products comply with specific regulations in the relevant market.*