

## Technical Data

# Nipacide IPBC

### General Description

Nipacide IPBC is a low toxicity biocide specifically developed for the complete microbiological protection of water based and solvent based products against algal and fungal spoilage in the dry and wet state. Nipacide IPBC is a powder product.

### Composition

Nipacide IPBC is one of a comprehensive range of biocides manufactured by Clariant UK Ltd. and is described chemically as a the technical grade of 3-iodo-2-propynylbutylcarbamate.

### Typical Properties

Nipacide IPBC has the following typical properties:

Property	Analysis
Appearance:	White crystals
pH:	NA
Solubility: <i>Water</i>	Dispersible
<i>Oil</i>	Dispersible
Stability: <i>Light</i>	Stable
<i>pH range</i>	4-9

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

### Biocidal Properties

Nipacide IPBC is effective against fungi and algae.

### Applications

Nipacide IPBC is recommended for a wide range of applications including adhesives, polymer emulsions, MWF and paint where protection against fungi and algae is required in the wet state and dry state.

### Use Level

The recommended use level of Nipacide IPBC to preserve most product types is normally in the range 0.1-2.0% based on the total weight of the finished product.

## MIC Levels

Nipacide IPBC 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>	>1500
<i>Pseudomonas putida</i>	>1500
<i>Proteus vulgaris</i>	400
<i>Escherichia coli</i>	300
<i>Staphylococcus aureus</i>	100
<b>Fungi:</b>	
<i>Aspergillus niger</i>	2
<i>Penicillium mineoluteum</i>	6
<i>Fusarium solani</i>	200
<i>Geotrichum candidum</i>	10
<b>Yeast:</b>	
<i>Candida albicans</i>	25

## Compatibility

Nipacide IPBC is compatible with most raw materials used in microbiologically susceptible products. Compatibility of Nipacide IPBC 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 IPBC should be stored at temperatures within the range 4-40°C. Containers containing Nipacide IPBC 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 24 months.

### Containers

Nipacide IPBC is available in 25Kg Keg, 200Kg Drum

## Container disposal

Prior to disposal, residual contents of containers of Nipacide IPBC should be drained into the product to be preserved. It is likely, however, that a small quantity of Nipacide IPBC 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 IPBC is biodegradable when diluted below the minimum inhibitory concentration and does not bioaccumulate.

## Toxicology

Nipacide IPBC toxicology is as follows:

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Acute Oral LD <sub>50</sub> (rat):	>2000mg/kg
Sensitisation:	Components are not known sensitisers
Classification:	The mixture is irritant

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## First Aid

Should Nipacide IPBC 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 IPBC should be contained, taken up mechanically and transferred to containers for disposal. Spillages should be disposed through specialist disposal contractors and according to local regulations.

**Fire/Explosion**

Nipacide IPBC is non-flammable and non-explosive.

**Other Relevant Information**

Regulations:

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.*