



PROMEX™ Na20TS

Broad spectrum preservative

**PROMEX™ Na20TS is a zero VOC solution of 20% 1,2-Benzisothiazolin-3-one
frost stable to - 5°C**

Key features

- used as a preservative of aqueous and water miscible chemicals and technical products
- innovative formulation does not contribute to VOC levels
- broad antimicrobial efficacy against bacteria, yeasts and fungi
- often effective where other preservatives fail, especially at critical temperature and pH-values
- free from formaldehyde, formaldehyde releasers, phenolics, heavy metals, halogens
- excellent thermal stability (- 5°C - 120°C)
- excellent chemical stability pH 2 - 12
- excellent long term efficacy
- low viscosity
- good compatibility with other commonly used raw materials

Characteristic properties

- clear amber solution
- odourless at use levels
- density at 20 °C: ca. 1.8 kg/l
- pH (0.1%): ca. 9 - 10
- dispersible in water
- compatible with non-ionic and anionic surfactants

PROMEX™ Na20TS meets the highest purity requirements. Technically generated impurities are often the cause of undesired side effects in terms of toxicological or technical properties. These impurities are reduced to a minimum in **PROMEX™ Na20TS**.

PROMEX™ Na20TS penetrates the cells of micro-organisms, reacts with vital parts of the cells and inactivates important substrates and enzymes necessary to normal cell function. These relatively unspecific reactions exhibit a bactericidal effect and minimise adaptation or the development of microbial resistance.

PROMEX™ Na20TS prevents microbial deterioration of products and resulting consequences such as:

- phase separation
- odour build-up
- gas build-up
- changes in viscosity
- build-up of health threatening toxins

Microbial efficacy

Bacteria	MIC (ppm)	Fungi and yeasts	MIC (ppm)
<i>Pseudomonas aeruginosa</i>	250	<i>Aspergillus niger</i>	350
<i>Pseudomonas putida</i>	250	<i>Chaetomium globosum</i>	400
<i>Escherichia coli</i>	40	<i>Penicillium notatum</i>	125
<i>Enterobacter cloacae</i>	80	<i>Saccharomyces cerevisiae</i>	250
<i>Staphylococcus aureus</i>	40	<i>Rhodotorula rubra</i>	500
<i>Streptococcus lactis</i>	15	<i>Candida albicans</i>	100
<i>Streptococcus faecalis</i>	40	<i>Endomycopsis albicans</i>	250

Applications

PROMEX™ Na20TS is highly suitable for the preservation of the majority of aqueous formulations due to its good thermal and chemical stability.

It shows highest efficacy in a wide pH range of pH 4 – 12 and is chemically stable from pH 2 – 12.

Experience shows that compatibility with most products and raw materials is excellent, although compatibility testing is recommended for special formulations.

Application areas

- paints
- polymer emulsions
- adhesives
- metal working fluids
- household cleaners and laundry products
- printing inks
- starches
- fount solutions
- dispersions

Regulatory approvals (Na20TS)

BAuA Reg.-Nr.: PT 2 - N-32259; PT 6 - N-32258; PT 12 - N-31842
USEPA Registration No. 080285-2

Regulatory approvals (BIT)

European Biocidal Products Directive (BPD) Notification No. N458
BfR Rec. XIV Preservative for polymer emulsions in food contact applications
BfR Rec. XXXVI Slimicide for manufacture of paper used in food contact applications
USEPA Registration No. 707-310-73930

Literature

- Wallhäußer, *Praxis der Sterilisation Desinfektion Konservierung*, 5. Auflage (1995)
ISBN 3-13-416305-5
- Schnuch, A., Geier, J., Uter, W., Frosch, P.J.: Patch testing with preservatives, antimicrobials, and industrial biocides. Results from a multicentre study. *British Journal of Dermatology* 138, 467-476 (1998)

DISCLAIMER

All information contained in this brochure is given in good faith, and without liability. It is intended for guidance only.

Users are advised to conduct their own independent examination of the product to ascertain its suitability for incorporation into processes or products.

Users should ensure that the use of the product complies with all pertinent current legislation.