



PROMEX™ TZ

Broad spectrum biocide dispersion

PROMEX™ TZ is a high purity, low odour, aqueous formulation of
1,3,5,-Tri-(2-hydroxyethyl)-1,3,5-hexahydrotriazine

Key features

- effective biocide for a wide range of industrial applications
- broad spectrum activity offers effective control against bacteria, yeasts and moulds
- can be used alone or in combination with other biocides
- low odour
- cost effective
- light colour
- TSCA and MITI listed

Characteristic properties

- formaldehyde donor
- high purity active, high quality grade of Hexahydrotriazine
- soluble in water, alcohols and propylene glycol in all proportions
- low to moderate acute toxicity
- effective pH range 6-10

PROMEX™ TZ 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
- slime build-up

Microbial efficacy

Bacteria	MIC (ppm)	Fungi and yeasts	MIC (ppm)
<i>Pseudomonas aeruginosa</i>	500	<i>Bacillus subtilis</i>	1000
<i>Pseudomonas fluorescens</i>	500	<i>Aspergillus niger</i>	1000
<i>Enterobacter aerogenes</i>	500	<i>Penicillium funiculosum</i>	500
<i>Klebsiella aerogenes</i>	500	<i>Saccharomyces cerevisiae</i>	500
<i>Staphylococcus aureus</i>	500	<i>Stachybotrys atra</i>	500
<i>Escherichia coli</i>	300	<i>Candida albicans</i>	500
<i>Bacillus cereus</i>	500	<i>Trichoderma viride</i>	1000

Applications

PROMEX™ TZ is used as a preservative in a number of different industrial applications where broad spectrum activity and relatively short contact times are required. Provision of free formaldehyde can confer “head space” protection when used as an in can preservative.

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

Use level: under normal use patterns concentrations of 0.1 - 0.3 % are sufficient in most applications.

Application areas

- paints
- adhesives
- metal working fluids
- polymer emulsions
- drilling fluids and oilfield additives
- paper mill additives
- slurries and dispersions

Ecological effects (Hexahydrotriazine)

Readily biodegradable in the environment (OECD 301). The product should not, however, be discharged into waterways without prior treatment. Harmful to fish (LC50 10 – 100mg/l).

Toxicological effects (Hexahydrotriazine)

LD ₅₀ , oral, rat	1000 mg / kg approx.
LD ₅₀ , dermal rat	2000 mg / kg

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.