ISOTHIAZOLINONE (1.5%)

Characteristics	Applications and doses
Isothiazolinone is a broad-spectrum biocide based on aqueous solution of CMIT/MIT stabilized with Magnesium salts. It is suitable for the preservation of a broad range of Waterborne products, with an excellent low-cost Effectiveness. It is free of formaldehyde. It is also free of solvents and voc. Low toxicity at use level.	Isothiazolinone is an excellent in-can preservative for dish washing liquids, liquid detergents, cleaners, fabric softeners, wax emulsions, window cleaners, scouring agents. The optimum dose of Isothiazolinone as preservative should be determined by the means of challenge tests in our laboratories, but we can recommend a dose between 0.05 and 0.25 % depending on the application.

Use guidelines

Isothiazolinone is fully soluble in water and usual polar solvents. It is stable in pH between 3 and 9 and temperatures up to 60 °C. Store at 25 °C.
Slightly acid pH values are preferred. Avoid high temperatures. Stearic and phosphoric acids can react with magnesium stabilizers in Isothiazolinone to form insoluble salts. Use hard water (better than deionized).
Avoid formulations containing cysteine and zinc pyrithione. When used in low dose it is recommended the use of complementing preservatives.

Technicla data	
Appearance	Colorless or slightly yellow
Odor	Characteristic
Density	0.99-1.21
pH	2-5
Solubility	Totally Soluble in water
CMIT&MIT%	1.5

Effectiveness

Isothiazolinone has shown its effectiveness against the following microorganisms among others. The figures indicate the MIC of the active ingredient.

Fungus and yeasts	Bacteria
	Bacilus subtilis
Candida albicans	Escherichia coli
Aspergillus niger	Pseudomonas aeruginosa
Saccharomices cerevisae	Staphylococcus aureus
	Pseudomonas fluorescens

General information on storage, safety and transport

Isothiazolinone is classified as dangerous product for transport, being labelled as corrosive C.
For further information refer to the material safety data sheet.

CERTIFICATE OF ANALYSIS

ISOTHIAZOLINONE (1.5%)

Date of analysis:	**24 /Jul/2024**
Batch number:	
Pro.Date:	**Jul. 2024**
Exp.Date:	**Jul. 2026**

Testing Items	Quality Criterion	Testing Result
Appearance	Yellowish transparent liquid	conform
MIT%	0.3-0.5	0.301
CMIT%	1.10-1.30	1.15
Total active ingredient%	≥1.5	1.59
PH	2.0-5.0	3.5
Density (25°) g/cm3	0.99-1.10	1.03