

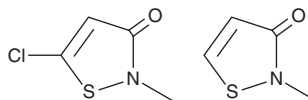
PRODUCT INFORMATION



Methylchloroisothiazolinone/Methylisothiazolinone Mixture

Item No. 27470

CAS Registry No.: 55965-84-9
Formal Name: 5-chloro-2-methyl-3(2H)-
isothiazolone mixt. with 2-methyl-
3(2H)-isothiazolone
Synonyms: CMIT/MIT, MCI/MI, MCIT/MIT
MF: C₄H₅NOS • C₄H₄CINOS
FW: 264.7
Purity: 14% MCIT/MIT
UV/Vis.: λ_{max}: 278 nm
Supplied as: A 14% (w/v) aqueous solution
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Methylchloroisothiazolinone/methylisothiazolinone mixture (MCIT/MIT) is supplied as a 14% (w/v) aqueous solution. To change the solvent, simply evaporate the aqueous solution under a gentle stream of nitrogen and immediately add the solvent of choice. A stock solution may be made by dissolving the MCIT/MIT in the solvent of choice. MCIT/MIT is soluble in water.

Description

MCIT/MIT is a mixture of isothiazolinone-derived biocides.^{1,2} It is effective against Gram-positive and Gram-negative bacteria with MIC values of 0.0002, 0.0002, 0.00005, and 0.00005% (w/w) for *S. aureus*, *P. aeruginosa*, *A. niger*, and *C. albicans*, respectively.² MCIT/MIT can elicit contact sensitization.³ Formulations containing MCIT/MIT have been used for controlling microbial growth in industrial and household products.

References

1. Frenzel, E., Schmidt, S., Niederweis, M., *et al.* Importance of porins for biocide efficacy against *Mycobacterium smegmatis*. *Appl. Environ. Microbiol.* **77(9)**, 3068-3073 (2011).
2. Lundov, M.D., Johansen, J.D., Zachariae, C., *et al.* Low-level efficacy of cosmetic preservatives. *Int. J. Cosmet. Sci.* **33(2)**, 190-196 (2011).
3. Scherrer, M.A.R. and Rocha, V.B. Increasing trend of sensitization to methylchloroisothiazolinone/methylisothiazolinone (MCI/MI). *An. Bras. Dermatol.* **89(3)**, 527-528 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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