

TRiStat E

MODERN PRESERVATIVE BASED ON NATURE-IDENTICAL INGREDIENTS



INCI: Benzyl Alcohol, Potassium Sorbate, Sodium Benzoate, Water

BENEFITS

Broad spectrum preservative system

Active at pH <5.5

Gentle to the skin

Soluble in glycerin, glycols & water

FEATURES

Based on nature-identical ingredients

Free from parabens, formaldehyde donors & isothiazolinones

Permitted in ECOCERT/COSMOS formulations

Cost effective modern system

APPLICATIONS

Natural & organic formulations

Aqueous gels & serums

Surfactant based formulations

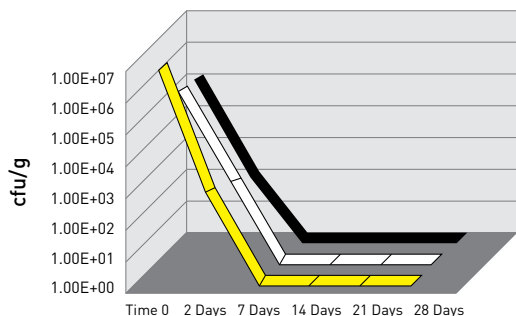
Face & body creams and lotions

Soluble in select oil based formulation

TRiStat E

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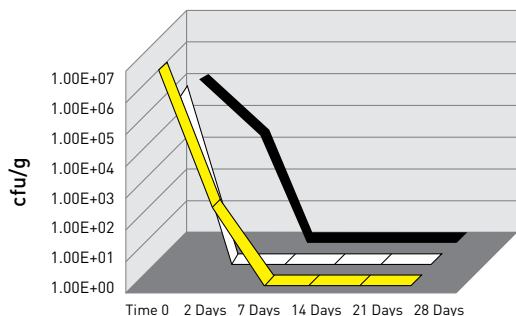
PRESERVATION EFFICACY IN OIL/WATER EMULSION, pH 5.5 WITH 1.2% TRiStat E



1.2% TRiStat E has shown to be effective in preserving the tested formula in 7 days

STRAINS	0 DAYS	2 DAYS	7 DAYS	14 DAYS	21 DAYS	28 DAYS	RESULTS
● E. coli	$7.7 \cdot 10^6$	$7.5 \cdot 10^2$	<10	<10	<10	<10	Passed
● P. aeruginosa	$7.7 \cdot 10^6$	$7.5 \cdot 10^2$	<10	<10	<10	<10	Passed
● S. aureus	$7.7 \cdot 10^6$	$7.5 \cdot 10^2$	<10	<10	<10	<10	Passed
○ C. albicans	$2.5 \cdot 10^5$	$4.2 \cdot 10^2$	<10	<10	<10	<10	Passed
● A. niger	$1.4 \cdot 10^5$	$1.6 \cdot 10^2$	<10	<10	<10	<10	Passed

PRESERVATION EFFICACY IN PEG & SULFATE-FREE SHOWER BATH, pH 5.0 WITH 0.7% TRiStat E



0.7% TRiStat E has shown to be effective in preserving the tested formula in 7 days

STRAINS	0 DAYS	2 DAYS	7 DAYS	14 DAYS	21 DAYS	28 DAYS	RESULTS
● E. coli	$7.7 \cdot 10^6$	$2.7 \cdot 10^2$	<10	<10	<10	<10	Passed
● P. aeruginosa	$7.7 \cdot 10^6$	$2.7 \cdot 10^2$	<10	<10	<10	<10	Passed
● S. aureus	$7.7 \cdot 10^6$	$2.7 \cdot 10^2$	<10	<10	<10	<10	Passed
○ C. albicans	$2.5 \cdot 10^5$	<10	<10	<10	<10	<10	Passed
● A. niger	$1.4 \cdot 10^5$	$2.7 \cdot 10^3$	<10	<10	<10	<10	Passed

EFFICACY TESTS

The antimicrobial activity of TRiStat E in different cosmetic formulations was evaluated by challenge testing, using a modified European Pharmacopoeia method

INHIBITORY (MIC) & BIOCIDAL (MBC) ACTIVITY OF TRiStat E IN PPM

TEST ORGANISMS (≈10 ⁶ CFU/ML)	MBC	MIC
Gram-negative bacterium <i>Escherichia coli</i>	5000	2000
Gram-negative bacterium <i>Pseudomonas aeruginosa</i>	5000	2500
Gram-positive bacterium <i>Staphylococcus aureus</i>	4000	1750
Yeast <i>Candida albicans</i>	3500	3000
Mold <i>Aspergillus niger</i>	6000	4000

TRiStat E has bacteriostatic & fungistatic effect at levels of 0.4%. It exhibits bactericidal & fungicidal activity at 0.6%

PROPERTIES

TRiStat E is a unique and very effective preservation system suitable for the protection of cosmetics against microbial contamination

FORTIFY • PROTECT • UNIQUE

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