

Iscaguard BCE

Paraben Free	Thiazolinone Free	Formaldehyde Free	Preservative Free	Natural
✓	✓	✓	✗	✗

INCI declaration
Aqua, triethylene glycol, caprylyl glycol, benzalkonium chloride, ethyl lauroyl arginate HCL

Iscaguard BCE is a multi-functional ingredient for use in cosmetic preparations. Iscaguard BCE is a highly effective preservative, offering a broad spectrum of activity against bacteria and fungi. Additionally, it can be used to improve the skin and hair conditioning properties of a formulation, as well as providing enhanced emulsion stability, humectancy, emolliency and deodorising effect. Iscaguard BCE has low odour, is colourless, fully soluble in water, and works across a wide range of pH.

In Use Concentrations	ISCA recommendation	EU Cosmetic Regulation (max)
Leave-on	0.1 – 0.5 %	1.0 %
Rinse-off	0.1 – 0.5 %	1.0 %

Not to be used for lip products, oral products and spray products. Label warning: “Avoid contact with eyes”.

In use concentrations vary according to the formulation type and other ingredients present. The correct use dosage should be determined by microbial challenge testing of the finished formulation (ISCA UK offers discounted challenge testing to our customers).

Recommended Applications

Shampoo, Shower gel (Rinse-off)	Creams, lotions (Leave-on)	O/W emulsions	W/O emulsions	Wet wipes	Eye care	Lip Care	Oral care	Children under 3
●	●	●	●	●				●

Use scenarios derived from evaluation of Cosmetic Regulation guidelines and preservative performance for typical formulations.

Formulation guidelines	
pH (effective range)	4.0 - 8.0
Solubility (Water)	Miscible
Solubility (Glycols)	Partially soluble
Maximum Process Temperature	40 °C
General information	Iscaguard BCE is compatible with most commonly used personal care ingredients, although high levels of anionic materials should be avoided. It is recommended that Iscaguard BCE is added as the last ingredient of the formulation, with low shear rate mixing. Where possible, process temperatures should be kept below 40 °C prior to addition.

Minimum Inhibitory Concentrations	
Microorganism	MIC (%)
Bacteria (gram-negative)	
Pseudomonas aeruginosa	0.4
Escherichia coli	0.128
Klebsiella pneumoniae	0.004
Bacteria (gram-positive)	
Staphylococcus aureus	0.002

Minimum Inhibitory Concentrations	
Microorganism	MIC (%)
Yeasts	
Candida albicans	0.064
Moulds	
Aspergillus niger	0.128


Physical Properties (approximate)	
Appearance	Clear colourless liquid
Colour	< 5 Hazen
Odour	Low
Density	~1.16 gcm ⁻³

Physical Properties (approximate)	
pH as supplied	6 - 8
Solubility in water	Miscible
Solubility in glycols	Partially soluble

Safety information

Cosmetic Regulation labelling requirements
No special labelling requirements.

Transport information	
UN number	UN 3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains Benzalkonium Chloride)
Transport hazard class	9
Packing group	III
Environmental hazards	Yes

Hazard classification/labelling	
Hazard pictograms	
Signal word	Danger
Hazard statements	H314 Causes severe skin burns and eye damage. H302 Harmful if swallowed. H410 Very toxic to aquatic life with long lasting effects.



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The information contained herein is, to the best of our knowledge, true and accurate. Any recommendations or suggestions are made without warranty or guarantee as the conditions of use are beyond our control. We strongly recommend that all products containing IscaGuard are rigorously tested to ensure suitability for end-use.

