Product Fact Sheet NIPAGUARD® SCE

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Preservative for the cosmetic industry

Chemical name	Preservative blend consisting of Sorbitan
	Monooctanoate, 1,3-Propanediol and Benzoic
	Acid
INCI designation	Sorbitan Caprylate (and) Propanediol (and)
	Benzoic Acid

PRODUCT PROPERTIES¹

Appearance (20℃) Yellowish to yellow colored liquid

Chemical and physical data

Gardner Colour max. 8
Density (20 ℃) 1.12 g/cm³

Sorbitan Caprylateapprox. 65 % w/wPropanediolapprox. 20 % w/wBenzoic Acidapprox. 15 % w/w

Uses

Nipaguard® SCE is a broad spectrum antimicrobial agent comprising a synergistic blend of Benzoic Acid in Velsan® SC (INCI: Sorbitan Caprylate) and Propanediol; designed for preservation of a wide range of cosmetics and toiletries. This blend is part of Clariant EcoTain range and is Ecocert certified, which makes it ideal for preservation of natural cosmetic products.

Regulatory status

Europe: Nipaguard® SCE can be used up to a maximum concentration of $3.1\,\%$ in leave-on products and practically no limitations for rinse-off (15.6%) and Oral Care (10.6%). No further restrictions according to Annex V of regulation (EC) No 1223/2009 have to be considered.

Japan: Maximum concentration 1.33 % for all kinds of cosmetic products.

USA: No restrictions, the ingredients of Nipaguard® SCE are designated "safe as used".

Applications

Typical use concentrations of Nipaguard® SCE are 0.5-1.5 % for most cosmetic formulations. Nipaguard® SCE provides activity against gram positive and gram

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¹ These characteristics are for guidance only and not to be taken as product specifications. The tolerances are given in the product specification sheet. For further product properties, specifications, safety and ecological data, please refer to the MSDS.



negative bacteria, yeasts and moulds. It works best at low pH from 4-5, but has also significant performance up to a pH of 6.5.

Incorporation

As a liquid Nipaguard® SCE is easily incorporated into formulations to be preserved. The solubility in water is below 0.05 g/l (20°C) and it is readily miscible with many organic solvents, surfactants and emulsifiers.

pH stability

Nipaguard® SCE remains fully stable from pH 4.0 - 8.0.

Temperature stability

Nipaguard® SCE remains fully stable over a wide temperature range, up to 80°C. Nevertheless it is best added during the cooling stage of the formulation.

Microbial activity

Nipaguard® SCE exhibits microbial activity against a wide range of bacteria, yeast and moulds. This is illustrated by the following table which shows the minimum inhibitory concentration (MIC) of Nipaguard® SCE against examples of different groups of microorganisms.

Microorganisms	MIC level [%]
Gram Negative Bacteria	
Pseudomonas aeruginosa	0.4
Escherichia coli	0.4
Gram Positive Bacteria	
Staphylococcus aureus	0.2
Yeasts	
Candida albicans	0.4
Moulds	
Aspergillus brasiliensis	0.4

Storage instructions

The product must be protected from excessively high and low temperatures during storage.

Further information on handling, storage and dispatch is given in the EC safety data sheet.

For sales to customers located within the United States and Canada the following applies in addition:

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