



# Aevum Vita 406

Paraben Free	Thiazolinone Free	Formaldehyde Free	Preservative Free	Natural Compliant
✓	✓	✓	✓	✓

INCI declaration
sodium caproyl/lauroyl lactylate (and) sodium citrate

Aevum Vita 406 is a mild, naturally derived surfactant for use in cosmetic and personal care products. As a PEG-free anionic surfactant with excellent foaming properties, it is ideally suited for use in baby shampoos, skin friendly hand washes, and natural cosmetic formulations. In addition, Aevum Vita 406 also exhibits anti-fungal and anti-bacterial properties, allowing formulators to reduce or even eliminate the preservative content from their formulations.. Also, its efficacy against *Malassezia furfur* makes it particularly suitable for use in antidandruff shampoos.

In Use Concentrations	ISCA recommendation	EU Cosmetic Regulation (max)
Leave-on	0.5 – 5 %	No limit
Rinse-off	0.5 – 10 %	No limit

In use concentrations vary according to the formulation type and the 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.



# Aevum Vita 406

## Formulation guidelines

pH range	4.0 - 8.5
Solubility (Water)	Miscible
Solubility (Glycols)	Miscible
Process Temperature	Can be processed hot or cold

Aevum Vita 406 is supplied as an aqueous liquid, and can be used in hot or cold processes. At typical use levels Aevum Vita 406 is non-irritating to skin.

Aevum Vita 406 improves the foam characteristics of formulations - improving both foam quantity and quality. It can be used in as a co-surfactant, for example, alongside alkyl polyglucosides. However, combination with Polyquaternium surfactants may lead to cloudiness in the end product.

### General information

Aevum Vita 406 possesses good fungicidal and bactericidal properties. Its preservative efficacy increases at acidic pH levels, so for optimum antimicrobial performance we recommend a maximum pH of 6. Therefore, depending on the pH of the end product, formulators may reduce or eliminate the preservative content from their formulations.

### Minimum Inhibitory Concentrations

Microorganism	MIC (%)
Bacteria (gram-negative)	
<i>Pseudomonas aeruginosa</i>	1.0
<i>Escherichia coli</i>	0.5
Bacteria (gram-positive)	
<i>Staphylococcus aureus</i>	0.25
<i>Propionibacterium acnes</i>	0.25

### Minimum Inhibitory Concentrations

Microorganism	MIC (%)
Yeasts	
<i>Candida albicans</i>	< 0.2
<i>Malassezia furfur</i>	0.2
Moulds	
<i>Aspergillus brasiliensis</i>	0.8

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