



multi-functional, multi-benefit



A selection of **specialised**, multi-functional cosmetic ingredients by ISCA.

Our Aevum Vita product range is a selection of specialised, multi-functional cosmetics ingredients which have been thoroughly investigated by our Research and Development team to demonstrate proof of concept.

If you would like a sample of one of our products, please complete the enquiry form at www.aevumvita.com



Our **Products**



Multipurpose **Emollient** **Aevum Vita** 300

> Multipurpose Blend of Fruit Acids / Natural Blend

evum Vita

Surfactant with Antimicrobial **Properties**



Anionic Thickener / Thickener for Gels



Anionic Thickener / **Natural Content** Thickener



Inverse Emulsion Thickener for lotions and creams

Additive with Antimicrobial **Properties**

Aevum Vita

04

06

16



Emollient

INCI: Propanediol

Aevum Vita 167 is a multipurpose ingredient for cosmetics, which functions as an emollient, humectant, preservative booster, viscosity enhancer and solvent.

It is derived from renewably sourced GMO-free glycerol and offers improved performance in comparison to petroleum-based glycols.

to improve both skin and hair moisturisation properties, increased smoothness, higher water absorption, a silky feel, but with reduced tackiness.

Aevum Vita 167 can be used in cosmetic formulations

Recommended Dosage

IN USE CONCENTRATIONS	ISCA RECOMMENDATION	EU COSMETIC REGULATION (MAX)
LEAVE ON	1.0 - 5.0 %	NO LIMIT
RINSE OFF	1.0 - 5.0 %	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)	~	W / O EMULSIONS	~	ORAL CARE	~
CREAM, LOTION (LEAVE-ON)	~	WET WIPES	~	EYE CARE	~
O/W EMULSION	v	LIP CARE	v	CHILDREN UNDER 3	~

Use scenarios derived from evolution of cosmetic regulation guidelines and preservative performance for typical formulations.



Formulation

Our caffeine and hyaluronic acid gel uses 0.5% **Aevum Vita 167** as an emollient to achieve a hydrating and moisturising finish. The formulation is adjusted to pH 4.9 using citric acid.

FORMULATION GUIDELINES				
PURITY	> 99.8%			
COLOUR	< 10 HAZEN			
WATER CONTENT	< 0.1%			
SOLUBILITY	MISCIBLE WITH GLYCOLS, ALCOHOLS, AND WATER			

Formulation Guidelines

Aevum Vita 167 is non-irritating / non-sensitising even at very high concentrations. It is miscible with most glycols and alcohols, and is easily dissolved in water.

Aevum Vita 167 can be combined synergistically with glycerin to produce a long lasting moisturising effect.

Aevum Vita 167 can also be used as a solvent for active ingredients such as allantoin, antioxidants, botanicals, etc, or it can be used as a preservative booster to increase the efficacy of antimicrobial ingredients such as phenoxyethanol.

Example Prototype

Awakening Caffeine Eye Serum

INGREDIENT	% BY WEIGHT
AQUA	94.9
AEVUM VITA 525	2.0
AQUAGUARD NK12	1.0
AEVUM VITA 167	0.5
SQUALENE	0.5
DIMETHYL SULFONE (MSM)	0.5
SODIUM HYALURONATE	0.5
CAFFEINE	0.1
CITRIC ACID TO pH 4.9	Q.S.





Natural Blend

INCI: aqua, lactic acid, phenylpropanol, citric acid, tartaric acid, gluconic acid

Aevum Vita 300 is an aqueous blend of naturally occurring fruit acids, which offers multiple benefits to the cosmetic formulator. It provides humectancy and skin conditioning properties, as well as enhanced stabilisation due to its chelating and buffering effects.

Recommended Dosage

IN USE CONCENTRATIONS	ISCA RECOMMENDATION	EU COSMETIC REGULATION (MAX)
LEAVE ON	1.0 - 1.5 %	NOT REGULATED (ANNEX V)
RINSE OFF	1.0 - 1.5 %	NOT REGULATED (ANNEX V)

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.

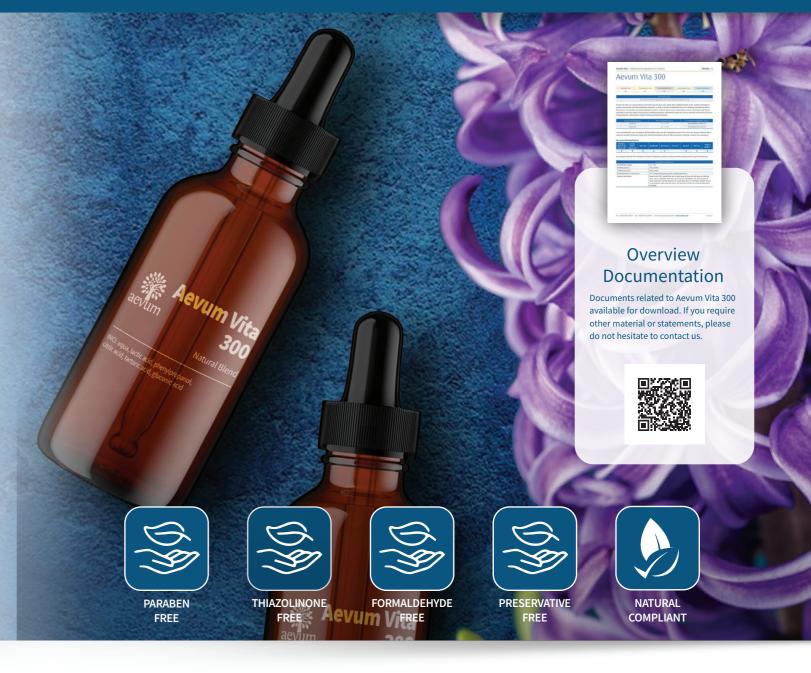
The presence of naturally sourced phenylpropanol imparts a delicate floral scent to end products, and its combination with tartaric acid helps to mask the odour of less pleasant smelling ingredients.

Additionally, **Aevum Vita 300** has powerful antibacterial and anti-fungal properties, allowing the creation of self-preserving formulations.

Recommended Applications

SHAMPOO, SHOWER GEL (RINSE-OFF)	~	DEODORANTS	✓	ORAL CARE	✓
CREAM, LOTION (LEAVE-ON)	~	WET WIPES	~	EYE CARE	~
HAIR CARE	~	LIP CARE	✓	CHILDREN UNDER 3	✓

Use scenarios derived from evolution of cosmetic regulation guidelines and preservative performance for typical formulations.



Formulation

Aevum Vita 300 has been used in a baby bottle cleanser formulation. Using **Aevum Vita 300** in as little as 1% allows the formulation to be confidently preserved and protected against microbial contamination. This formulation has passed an EP challenge test (Report No. 22155)

FORMULATION GUIDELINES				
PH (EFFECTIVE RANGE)	2.0 - 6.0			
SOLUBILITY (WATER)	FULLY SOLUBLE			
SOLUBILITY (GLYCOLS)	FULLY SOLUBLE			
MAXIMUM PROCESS TEMPERATURE	80°C (AVOID PROLONGED PERIODS AT HIGH TEMPERATURE)			

Formulation Guidelines

Aevum Vita 300 is suitable for use in wide range of rinseoff and leave-on formulations, and is compatible with most personal care ingredients.

The antimicrobial efficacy of **Aevum Vita 300** increases as its pH decreases. It is, therefore, suitable for use in formulations with acidic pH values, but loses its efficacy as the pH approaches neutrality.

Example Prototype Baby Bottle Cleanser as Concentrate

% BY WEIGHT
92.7 - 93.7
3.0
1.0 - 2.0
1.0
1.0
0.3
Q.S.

Evaluation of Anti-Microbial Activity Microbial Kill Test

Our baby bottle cleanser has been assessed in a microbial kill test against a standard culture of mixed bacteria according to ASTM E2315 (Report No. 23037). Three individual formulations with increasing levels of **Aevum Vita 300** were assessed. The anti-microbial activity increases with **Aevum Vita 300** levels, achieving a percentage reduction in bacteria is >99% within 5 minutes.

CLEANSER CONTAINING	PERCENTAGE REDUCTION IN BACTERIA AFTER			
	30 SEC	2 MIN	5 MIN	
1% AEVUM VITA 300	76.30%	94.50%	99.80%	
1.5% AEVUM VITA 300	79.20%	97.80%	99.99%	
2% AEVUM VITA 300	83.70%	98.40%	99.99%	



Multifunctional Surfactant

INCI: 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 antibacterial 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.

Recommended Dosage

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)	~	W/O EMULSIONS	~	ORAL CARE	~
CREAM, LOTION (LEAVE-ON)	~	WET WIPES	~	EYE CARE	~
O/W EMULSION	~	LIP CARE	~	CHILDREN UNDER 3	~

Use scenarios derived from evolution of cosmetic regulation guidelines and preservative performance for typical formulations.



Sensory Testing

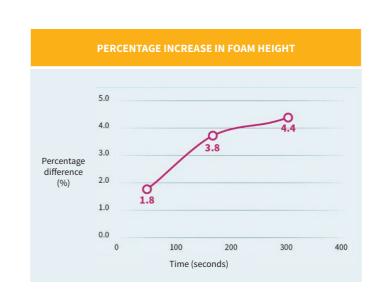
In blind tests conducted with a formulation containing 2% of **Aevum Vita 406**, the majority of volunteers (64%) without prompting described their hands as feeling "soft" or "smooth" after using the soap containing **Aevum Vita 406** and commented that the formulation without **Aevum Vita 406** did not lather as well.

Foaming Properties

The foam height and decay of **Aevum Vita 406** was tested using Ross Miles apparatus under standard test conditions.

Each surfactant (**Aevum Vita 406** and Sodium Lauryl Sulphate) was tested as a 10% aqueous solution based on active content. The dilute solutions were dropped from a fixed height into a reservoir of the same dilute solution.

The foam height was measured over a period of five minutes. **Aevum Vita 406** gave a greater volume of foam, and better foam stability, than the equivalent solution of Sodium Lauryl Sulphate. In addition, **Aevum Vita 406** can be used as a foam booster.



A solution containing 9 parts of SLS to 1 part of **Aevum Vita 406** produces a greater amount of foam than using SLS solution alone.

Other surfactants such as cocoamidopropyl betaine, cocoglucoside and decylglucoside have also been assessed for their foam height and stability in combination with and without **Aevum Vita 406**.

Results show that **Aevum Vita 406** can be used confidently as a co-surfactant.

Formulation

Antimicrobial Data

Aevum Vita 406 has powerful antimicrobial properties which can be applied to a variety of applications such as intimate washes, antidandruff washes and anti-acne face washes.



Example Prototype **Grapefruit Dandelion shampoo bar**

Both the anti-dandruff shampoo bar and the anti-dandruff liquid shampoo achieved a 99.99% reduction in Malassezia furfur within 30 seconds based on ASTM E2315 method.

Malassezia furfur is a yeast which is thought to be one of the most common causes of dandruff.

INGREDIENT	% BY WEIGHT
SODIUM LAURETH SULPHATE	84.0
RICINUS COMMUNIS SEED OIL	4.0
COCO NUCIFERA OIL	4.0
PRUNES AMYGDALUS DULCIS OIL	4.0
AEVUM VITA 406	2.0
TARAXACUM OFFICINALE LEAF EXTRACT	1.0
HYDROLYSED LUPINE SEED EXTRACT	0.5
CITRUS GRANDIS (GRAPEFRUIT) PEEL OIL	0.5

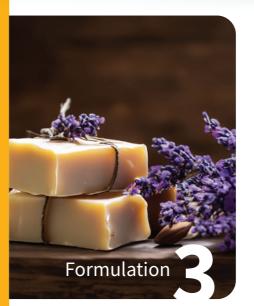


Example Prototype Lupine seed antidandruff liquid shampoo

Both the anti-dandruff shampoo bar and the anti-dandruff liquid shampoo achieved a 99.99% reduction in Malassezia furfur in 30 seconds based on ASTM E2315 method. Malassezia furfur is a yeast which is thought to be one of the most common causes of dandruff. Our Aevum Vita 406 liquid shampoo formulations have been

INGREDIENT	% BY WEIGHT
SODIUM LAURETH SULPHATE (27%)	55.56
AQUA	24.77
COCOAMIDOPROPYL BETAINE (30%)	16.67
HYDROXYETHYL CELLULOSE	2.0
COCO NUCIFERA OIL	1.0
AEVUM VITA 406	0.5
HYDROLYSED LUPINE SEED EXTRACT	0.5

thoroughly tested to demonstrate proof of concept. Our anti-dandruff studies using Aevum Vita 406 have been published in Personal Care Global Magazine.



Sweet Almond and Lavender soap bar

Our anti-bacterial soap bar containing 2.0% **Aevum Vita 406** achieved a >99.99% reduction in mixed bacterial cultures within 30 seconds based on the ASTM E2315 method. In addition to antimicrobial activity, our soap bar was subjected to blind sensory testing, where the majority of volunteers noticed a positive difference in sensory properties between bars of soap made with and without **Aevum Vita 406**.

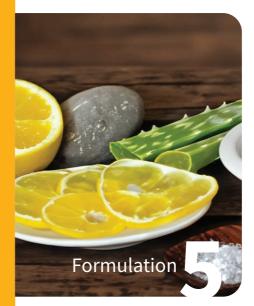
INGREDIENT	% BY WEIGHT
PRUNUS AMYGDALUS DULCIS OIL	22.5
RICINUS COMMUNIS SEED OIL	21.0
COCOS NUCIFERA OIL	21.0
AQUA	19.0
SODIUM HYDROXIDE	13.0
AEVUM VITA 406	2.0
LAVANDULA ANGUSTIFOLIA OIL	0.5
ALGAE EXTRACT	0.5
SODIUM STEARATE	0.5



Example Prototype Feminine Hygiene Wash

Aevum Vita 406 at 1% in a self-preserving feminine hygiene wash formulation passed a European Pharmacopoeia challenge test. In a BS:EN 1650 time kill time test, the same formulation achieved a 4 log reduction (99.99%) within 5 minutes.

INGREDIENT	% BY WEIGHT
AQUA	65.7
COCOAMIDOPROPYL BETAINE (30%)	16.67
SODIUM LAURYL SULFATE	10.0
COCO GLUCOSIDE	2.65
SODIUM CHLORIDE	1.4
AEVUM VITA 406	1.0
LAURYL GLUCOSIDE	1.0
LACTIC ACID (88%)	1.0
GLYCERIN	0.5
ALOE VERA WATER	0.5
GLYCERYL OLEATE	0.5
NAOH - ADJUSTED TO pH 4	Q.S.
10.011-AD3031ED 10 p114	Q.3.



Example Prototype Anti-acne Face Wash

Aevum Vita 406 dosed at 1% in a preservative free face wash formula passed an EP challenge test, as well as achieving a 90% reduction of C. acnes within 30 seconds, and 99% reduction within 3 minutes in the ASTM E2315 time kill test.

INGREDIENT	% BY WEIGHT
AQUA	63.3
COCOAMIDOPROPYL BETAINE (30%)	16.67
SODIUM LAURYL SULFATE	10.0
WITCH HAZEL WATER	2.7
COCO GLUCOSIDE	2.0
SODIUM CHLORIDE	1.7
AEVUM VITA 406	1.0
LAURYL GLUCOSIDE	1.0
ALOE VERA WATER	0.6
GLYCERIN	0.5
GLYCERYL OLEATE	0.5
CITRIC ACID TO pH 5	Q.S.



Rheology Modifier

INCI: ammonium polyacryloyldimethyl taurate

Aevum Vita 525 is an anionic thickener, supplied as a powder. It can be used to create crystal clear gels, or medium viscosity emulsions with a silky soft feel. In surfactant-based formulations, it provides enhanced foam stability, and it has excellent electrolyte resistance.

Easily dispersed, **Aevum Vita 525** is suitable for hot or cold processes, across a wide pH range.

ISCA have formulated **Aevum Vita 525** in prototype products such as serums, facial gels and formulations which require suspended ingredients.

Recommended Dosage

IN USE CONCENTRATIONS	ISCA RECOMMENDATION	EU COSMETIC REGULATION (MAX)
LEAVE ON	1.0 - 3.0 %	NO LIMIT
RINSE OFF	1.0 - 3.0 %	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)	~	W/O EMULSIONS	~	ORAL CARE	~
CREAM, LOTION (LEAVE-ON)	~	WET WIPES	~	EYE CARE	~
O/W EMULSION	~	LIP CARE	~	CHILDREN UNDER 3	~

Use scenarios derived from evolution of cosmetic regulation guidelines and preservative performance for typical formulations.



Formulation

Our aloe vera and menthol cooling gel uses 1.5% **Aevum Vita 525** to achieve an easy-to-apply and hydrated gel, perfect for reducing heat from the skin.



Skin Hydration

Skin hydration was measured using a Corneometer® CM 82. Based on the average of triplicate readings, our eye gel gave 206% increase in skin hydration after 5 minutes, and 130% after 10 minutes.



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Example Prototype Cooling Aloe Vera and Menthol Gel

INGREDIENT	% BY WEIGHT
AQUA	87.5
OCIMUM BASILICUM (BASIL) LEAF OIL	5.0
ISOPROPYL ALCOHOL	2.0
PROPYLENE GLYCOL	1.5
AEVUM VITA 525	1.5
ISCAGUARD PEG	1.0
MENTHOL	0.5
POLYSORBATE 20	0.5
GLYCERIN	0.25
LAVANDULA ANGUSTIFOLIA OIL	0.1
CITRUS LIMON PEEL OIL	0.1
TOCOPHEROL	0.05
CITRIC ACID / NAOH TO pH 5.1	Q.S.



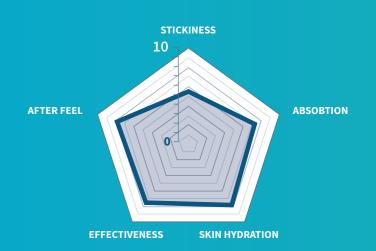
Example Prototype Awakening Caffeine Eye Serum

INGREDIENT	% BY WEIGHT
AQUA	94.9
AEVUM VITA 525	2.0
AQUAGUARD NK12	1.0
AEVUM VITA 167	0.5
SQUALENE	0.5
DIMETHYL SULFONE (MSM)	0.5
SODIUM HYALURONATE	0.5
CAFFEINE	0.1
CITRIC ACID TO pH 4.9	Q.S.

Aevum Vita 525

Sensory Testing

Sensory testing for 15 volunteers showed that the caffeine eye gel formulation was positively received. Volunteers rated the formulation based on **5 factors**.



STICKINESS	1 - VERY STICKY, 10 - NOT STICKY
ABSORPTION	1 - DOES NOT ABSORB WELL, 10 - ABSORBS VERY WELL
SKIN HYDRATION	1 - SKIN DOES NOT FEEL HYDRATED, 10 - SKIN FEELS WELL HYDRATED
EFFECTIVENESS - AGAINST LINES, TIREDNESS, PUFFINESS	1 - NOT AN EFFECTIVE EYE SERUM, 10 - EFFECTIVE EYE SERUM
AFTER FEEL	1 - UNPLEASANT AFTER FEEL, 10 - PLEASANT AFTER FEEL





Rheology Modifier

INCI: sodium acrylate/sodium acryloyldimethyl taurate copolymer, C15-19 alkane, lauryl glucoside

Aevum Vita 532 is an anionic thickener and texturizing agent, which contains more than 65% natural origin content. Supplied in liquid form, and easy to use, **Aevum Vita 532** provides effective thickening to a wide range of cosmetic formulations.

It can be used over a wide pH range, in both hot or cold processes. In addition to its rheological properties, **Aevum Vita 532** imparts a soft, light feel to end products.

Recommended Dosage

IN USE CONCENTRATIONS	ISCA RECOMMENDATION	EU COSMETIC REGULATION (MAX)
LEAVE ON	2.0 - 4.0 %	NO LIMIT
RINSE OFF	2.0 - 4.0 %	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)	~	W/O EMULSIONS	~	ORAL CARE	~
CREAM, LOTION (LEAVE-ON)	v	WET WIPES	~	EYE CARE	~
O/W EMULSION	v	LIP CARE	~	CHILDREN UNDER 3	~

Use scenarios derived from evolution of cosmetic regulation guidelines and preservative performance for typical formulations.



Example Prototype

Nourishing Milk Renewal Cleanser

INGREDIENT	% BY WEIGHT
ROSA DAMASCENA FLOWER OIL	84.75
AQUA	9.60
AEVUM VITA 532	2.0
ISCAGUARD PEG	1.0
PUNICA GRANATUM (POMEGRANATE) SEED OIL	1.0
FICUS CARICA (FIG) EXTRACT	1.0
SQUALANE	0.5
VITAMIN E	0.1
CITRIC ACID TO pH 5.5	Q.S.

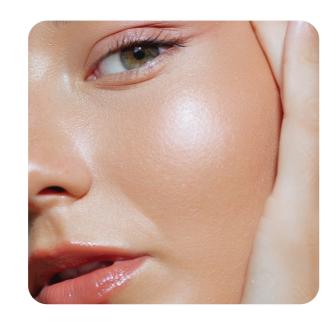
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Formulation

Our milk cleanser has been thoroughly investigated and stands as a proof-of-concept prototype for **Aevum Vita 532**. Our formulation has passed a European Pharmacopoeia challenge test and an in-house accelerated stability test. Formulation has passed an EP Challenge Test (Report No. 23057).

Skin Hydration

Skin hydration was measured using a Corneometer® CM 82. Based on the average of triplicate readings, our eye gel gave 206% increase in skin hydration after 5 minutes, and 130% after 10 minutes.

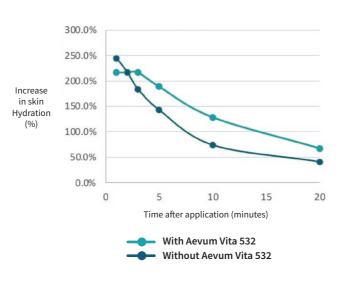






Example Prototype Nourishing Milk Renewal Cleanser

Formulations with and without **Aevum Vita 532** were analysed for an increase in skin hydration. **Aevum Vita 532** was shown to increase skin hydration by an extra 74% in skin hydration after 10 minutes.



Formulation 2

Example Prototype Silicone-Free Make-Up Primer

Our silicone-free make-up primer uses 5.0% **Aevum Vita 532** to achieve an effective make-up base, which not only provides exceptional sensory benefits, but also is able to combine oil ingredients in a largely aqueous formulation. This formulation was blind tested on 25 volunteers and was positively received. Formulation has passed an EP Challenge test (Report No. 23083).

INGREDIENT	% BY WEIGHT
AQUA	85.15
ROSSA DAMASCENA FLOWER OIL	7.0
AEVUM VITA 532	5.0
ISCAGUARD PEG	1.0
PEG 40 HYDROGENERATED CASTOR OIL	0.75
PUNICA GRANATUM (POMEGRANATE) SEED OIL	0.5
GLYCERIN	0.5
VITAMIN E	0.5
CITRIC ACID TO pH 5.5	Q.S.

Stability Data

Our formulations have passed an accelerated stability test at 40 °C. The viscosities were measured over time and showed that the formulations were stable and showed no visual degradation within this time.

VISCOSITY AT 20 RPM (CP) AT TIME (DAYS)					
FORMULATION	0	14	28	42	84
NOURISHING MILK RENEWAL CLEANSER	11350	11400	11350	11650	9900
GENTLE SEAWEED HAND CREAM	19150	15850	16000	16100	20600
SILICONE-FREE MAKE-UP PRIMER	24550	23650	24550	22900	23150

Skin Hydration after Application

Skin hydration was measured using a Corneometer® CM 82. Average temperature 19°C, Average humidity: 49.5%. Based on the average of triplicate readings, our cleanser gave an extra 74% increase in skin hydration after 10 minutes in comparison to a formulation that did not contain **Aevum Vita 532**.



Example Prototype Gentle Seaweed Hand Cream

Our gentle seaweed hand cream uses **Aevum Vita 532** (2%) to impart a
silky and luxurious after-feel. **Aevum Vita 532** is able to be used in O/W
and W/O emulsion systems with high
stability. Formulation has passed an
EP Challenge test (Report No. 23057)

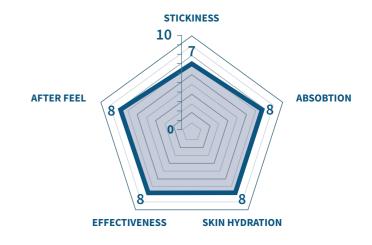
INGREDIENT	% BY WEIGHT
AQUA	79.5
COCONUT OIL	7.8
GLYCERIN	5.0
GLYCERYL STEARATE SE	4.0
AEVUM VITA 532	2.0
ISCAGUARD OP	1.0
SEAWEED EXTRACT	0.5
VITAMIN E	0.2
CITRIC ACID TO pH 6.0	Q.S.

Sensory Testing

Our silicone-free make-up primer was blind tested by 25 volunteers. Results showed that 88% of people would consider using this product on a regular basis, and the soft-after feel from **Aevum Vita 532** was a clear sensory benefit.

Average ratings for after-feel, absorption, effectiveness, and skin-hydration were rating more than 7 out of 10. Stickiness was rated 6 out of 10. In this case, this is within the optimum region for the formulation.

A make-up primer must be sticky enough to adhere make-up to skin flawlessly, without being unpleasant.



STICKINESS	1 - VERY STICKY, 10 - NOT STICKY
ABSORPTION	1 - DOES NOT ABSORB WELL, 10 - ABSORBS VERY WELL
SKIN HYDRATION	1 - SKIN DOES NOT FEEL HYDRATED, 10 - SKIN FEELS WELL HYDRATED
EFFECTIVENESS - AGAINST LINES, TIREDNESS, PUFFINESS	1 - NOT AN EFFECTIVE EYE SERUM, 10 - EFFECTIVE EYE SERUM
AFTER FEEL	1 - UNPLEASANT AFTER FEEL, 10 - PLEASANT AFTER FEEL



Rheology Modifier

INCI: polyacrylamide, C13-14 isoalkane (formerly C13-14 isoparaffin), laureth-7, aqua

Aevum Vita 595 is an inverse emulsion thickener, which provides stabilising and texturising properties to a wide range of cosmetic formulations. **Aevum Vita 595** is supplied as an easy to use, low viscosity liquid, and is suitable for both aqueous and non-aqueous compositions.

It can be used over a wide pH range, in both hot or cold processes. In addition to its rheological properties, **Aevum Vita 595** imparts noticeable sensory benefits to the end product.

Recommended Dosage

IN USE CONCENTRATIONS	ISCA RECOMMENDATION	EU COSMETIC REGULATION (MAX)
LEAVE ON	1.0 - 3.0 %	NO LIMIT
RINSE OFF	1.0 - 3.0 %	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)	~	W/O EMULSIONS	~	ORAL CARE	~
CREAM, LOTION (LEAVE-ON)	~	WET WIPES	~	EYE CARE	~
O/W EMULSION	~	LIP CARE	~	CHILDREN UNDER 3	~

Use scenarios derived from evolution of cosmetic regulation guidelines and preservative performance for typical formulations.



Formulation

Our hand cream has been thoroughly investigated and stands as a proof-of-concept prototype for **Aevum Vita 595**.

Our formulation has passed a European Pharmacopoeia challenge test and an in-house accelerated stability test, where the samples were kept at 40 °C for an extended period of time.

Accelerated Stability Data

монтн	1	6
VISCOSITY AT 20 RPM (CP)	36650	23650

Example Prototype

Vitamin E and Aloe Vera Hand Cream

% BY WEIGHT
73.8
8.0
5.0
5.0
4.0
3.0
1.0
0.2





Example Prototype

Renewal Milk Cleanser

Aevum Vita 595 is suitable for a wide range of formulations. At 1.25%, **Aevum Vita 595** can be used in a milk cleanser formulation to give a soft, milky feel. Blind sensory testing against a leading UK brand showed that the milk cleanser using **Aevum Vita 595** gave exceptional sensory benefits.

This formulation has passed a challenge test (Report No. 22126.)

INGREDIENT	% BY WEIGHT
ROSA DAMASIENA FLOWER OIL	84.75
AQUA	10.3
AEVUM VITA 595	1.25
FICUS CARICA (FIG) EXTRACT	1.0
POMEGRANATE SEED OIL	1.0
ISCAGUARD PEG	0.8
SQUALENE	0.5
VITAMIN E	0.4
CITRIC ACID TO pH 5.5	Q.S.

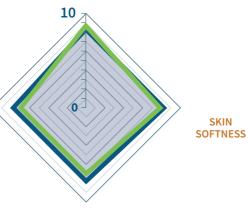
Sensory Testing

Sensory blind testing was conducted between our **Aevum Vita 595** hand cream and an identical formulation using a competitor thickener. Fifteen volunteers were asked for rate the spreadability, absorption, skin softness and stickiness from 1 to 10. There were no noticeable significant differences in any of the factors.

SPREADABILITY	1 - VERY SPREADABLE, 10 - NOT SPREADABLE
ABSORPTION	1 - DOES NOT ABSORB WELL, 10 - ABSORBS VERY WELL
SKIN SOFTNESS	1 - SKIN DOES NOT FEEL SOFT, 10 - SKIN FEELS SOFT
STICKINESS	1 - VERY STICKY, 10 - NOT STICKY

INGREDIENT	WEIGHT
ROSA DAMASIENA FLOWER OIL	84.75
AQUA	10.3
AEVUM VITA 595	1.25
FICUS CARICA (FIG) EXTRACT	1.0
POMEGRANATE SEED OIL	1.0
ISCAGUARD PEG	0.8
SQUALENE	0.5
VITAMIN E	0.4
CITRIC ACID TO pH 5.5	Q.S.

SPREADABILITY



STICKINESS

ABSORPTION

Aevum Vita 595

Volunteer comments

66 Felt good on skin, thorough cleansing as well. " 66 Soothes skin well. Easy to use and spreads well.

66 Removed make-up very well, leaves skin feeling soft.

66

Feels smooth on skin.

22

66 Made my face feel soft and did not dry it out.

66 Left my skin feeling good.

66 I used it as my makeup remover and found it was very good at removing all traces of my make up.

"

22

It made my skin feel smooth after use.

"

Aevum Vita Multi-functional, Multi-benefit +44 (0)1495 200 747 | www.aevumvita.com **23**



Aevum Vita LV10

multifunctional additive with antimicrobial properties

INCI: aqua, sodium levulinate, potassium sorbate

Aevum Vita LV10 is a multifunctional additive for cosmetics, containing sodium levulinate - a naturally derived ingredient. **Aevum Vita LV10** can provide formulations with excellent skin conditioning properties, and well as improved application characteristics.

Additionally, **Aevum Vita LV10** can be used for its antimicrobial activity, to preserve rinse-off formulations, or to reduce the level of preservative required in leave-on formulations.

Recommended Dosage

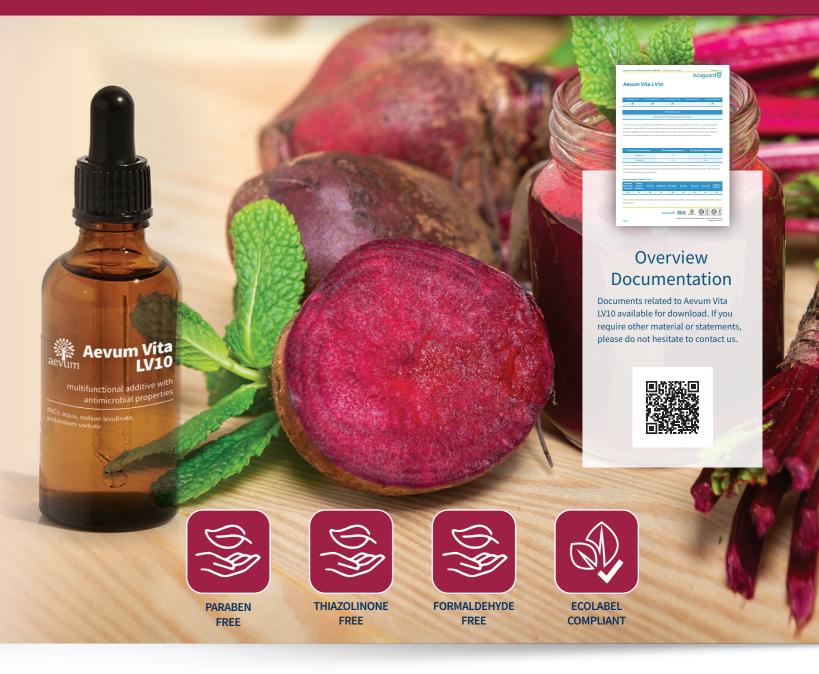
IN USE CONCENTRATIONS	ISCA RECOMMENDATION	EU COSMETIC REGULATION (MAX)
LEAVE ON	1.0 - 2.0 %	8%
RINSE OFF	1.0 - 2.0 %	8%

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)	~	DEODORANTS	~	LIP CARE	~
CREAM, LOTION (LEAVE-ON)	~	WET WIPES	~	OPAL CARE	~
HAIR CARE	~	EYE CARE	~	CHILDREN UNDER 3	~

Use scenarios derived from evolution of cosmetic regulation guidelines and preservative performance for typical formulations.



Formulation

FORMULATION GUIDELINES				
PH (EFFECTIVE RANGE)	5.5 MAX			
SOLUBILITY (WATER)	MISCIBLE			
SOLUBILITY (GLYCOLS)	MISCIBLE			
MAXIMUM PROCESS TEMPERATURE	60°C			



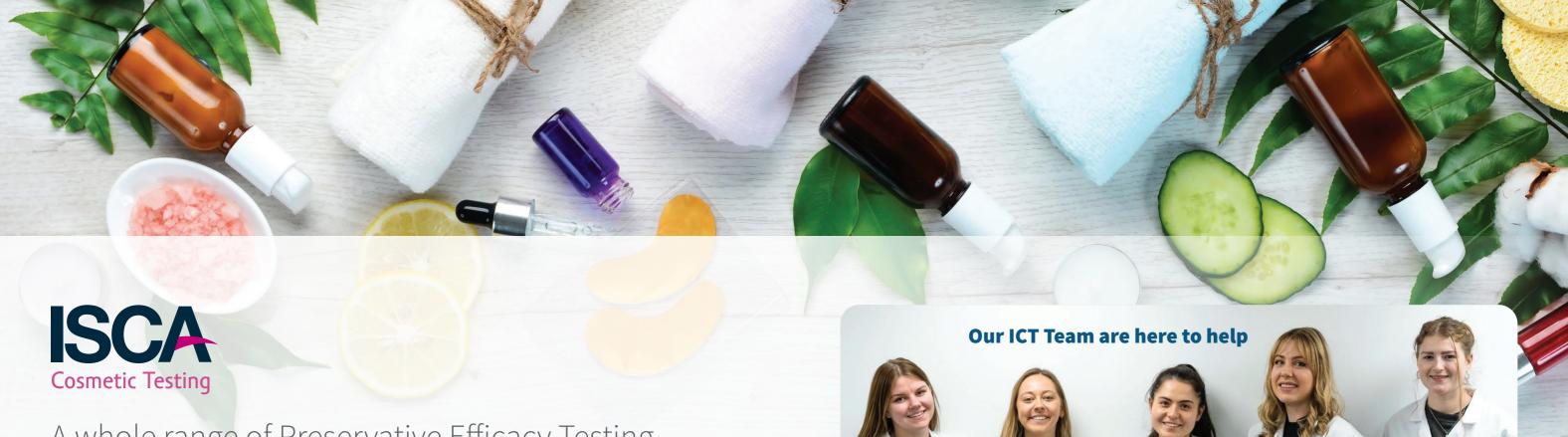
Formulation Guidelines

The multifunctional properties of **Aevum Vita LV10** require acidic conditions for their effect, and we recommend a maximum pH value of approximately 5.5. In particular, the preservative efficacy of **Aevum Vita**

MINIMUM INHIBITORY CONCENTRATIONS (pH = 5.0)				
MIC (%)				
BACTERIA (GRAM-NEGATIVE)				
0.5				
0.5				
BACTERIA (GRAM-POSITIVE)				
0.5				
0.5				

LV10 increases as the pH of the formulation decreases. **Aevum Vita LV10** is completely soluble in water, and we recommend adding it as the last ingredient of the formulation, when the batch has cooled below 60 °C.

MINIMUM INHIBITORY CONCENTRATIONS (pH = 5.5)				
MIC (%)				
YEASTS				
1.5				
MOULDS				
2.0				



A whole range of Preservative Efficacy Testing.

All cosmetic products sold in the EU and UK require a Product Information File (PIF). The PIF contains the Cosmetic Product Safety Report (CPSR) that should include details of the challenge test (PET test), results of stability testing, as well as an assessment of the product's safety.

Isca Cosmetic Testing offers EP, USP, and ISO Challenge Tests, Vegan Alternative PET Methods, and Cosmetic Product Safety Reports.

Further services include **stability testing**, **time-kill tests**, and **various claims testing**.



EP, USP, ISO or Vegan EP / USP PET Test?

When selling cosmetic products, it is crucial to comply with the regulatory requirements of the country in which the product is being sold. The quality and safety of formulations are typically determined by one of three major standards: the European Pharmacopoeia (EP), the International Organization for Standardization (ISO), or the United States Pharmacopeia (USP).

Each of these organisations set different standards for product testing and quality control, so it is important to choose the appropriate standard for the country in which you are selling your products.



For example, if you are selling your product in Europe, you may need to comply with EP standards, while products sold in the US may need to meet USP standards.

Choosing the right test and certification standard can help ensure that your product is safe and effective, and that it complies with local regulations and standards.

Customised Tests & Packages

We can offer bespoke versions of the standard tests, for example, using extended incubation times, repeated inoculations, use of additional organisms or specific strains.





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View our website

To learn more about our Iscaguard products or to request a sample please view our website by scanning the QR code link below with your mobile device.

www.iscaguard.com





Our Publications

Our R&D team regularly publishes results from our internal research projects in reputable cosmetic industry magazines in English, as well as Chinese and Spanish.

Publication Downloads

If you require other material or statements, please do not hesitate to contact us.



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