



**ACTIVE MICRO**  
TECHNOLOGIES



*NATURAL*  
**ANTIMICROBIALS**

Sustainable Multifunctional Solutions for Personal Care



# TABLE OF CONTENTS

## 01. *INTRO & TRENDS*

Enter the green era.

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## 05. *FORMULATION*

Tips to help you achieve your targets.

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## 07. *DECISION TREE*

Select your best companion.

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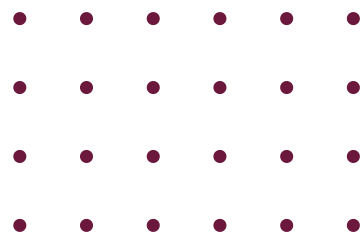
## 09. *PRODUCTS*

Multifunctional solutions.

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## 13. *OUR FAMILY*

Discover our sisters.



# VERSATILITY REDEFINED



Active Micro Technologies (AMT) has focused its efforts on the power of natural compounds, combining cosmetic functionality with antimicrobial activity, to develop a range of multifunctional ingredients that can reduce or eliminate the use of conventional preservatives.

AMT strives to continuously improve and add to its sustainable, nature-based product line while also welcoming the opportunity to custom develop alternative antimicrobial solutions.

# BE YOU-NIQUE

Active Micro Technologies prioritizes the potential of natural compounds to create a series of multifunctional ingredients that merge cosmetic functionality with antimicrobial activity. Our unique approach allows for a reduction or elimination of reliance on more traditional preservatives.

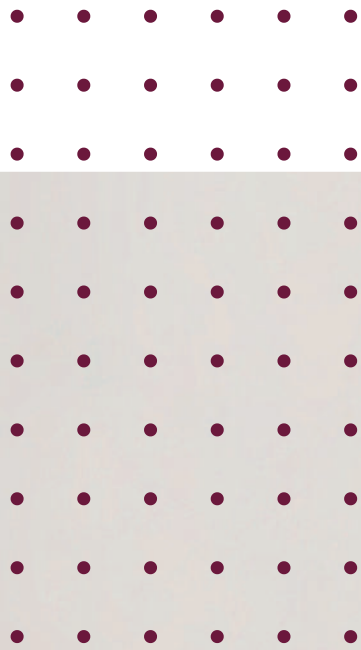
By utilizing our solutions, you have a chance to distinguish your brand. Be true to your beauty identity, be daring, and be safe.

At AMT, we are committed to enhancing our sustainable and nature-focused product line continually. Moreover, we welcome the opportunity to craft customized alternative antimicrobial remedies for our clients.



## What's New?

At AMT, we endeavor to anticipate our customer's needs by developing innovative solutions that promote a more vibrant and confident expression of beauty. Committed to sustainability while incorporating contemporary functionality, we are pioneering alternative cosmetic solutions.



The world of cosmetic preservation is changing. The market has been driven to alternative solutions for product preservation as a result of consumer pressure and regulatory environments. AMT has developed a line of products based on naturally occurring compounds that provide active cosmetic properties, but are also capable of upholding product integrity.



• • • • •

## THE GREEN ERA

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Manufacturers add preservatives to formulations to control microbial growth, extending the shelf life of these products. A number of synthetic preservatives have fallen from favour with regulators and consumers, due to issues like sensitisation, and other health related concerns. As a result, we see a growing demand for proactive, innovative and alternative solutions to synthetic preservatives.



## PRESERVATION IS NOT STERILISATION

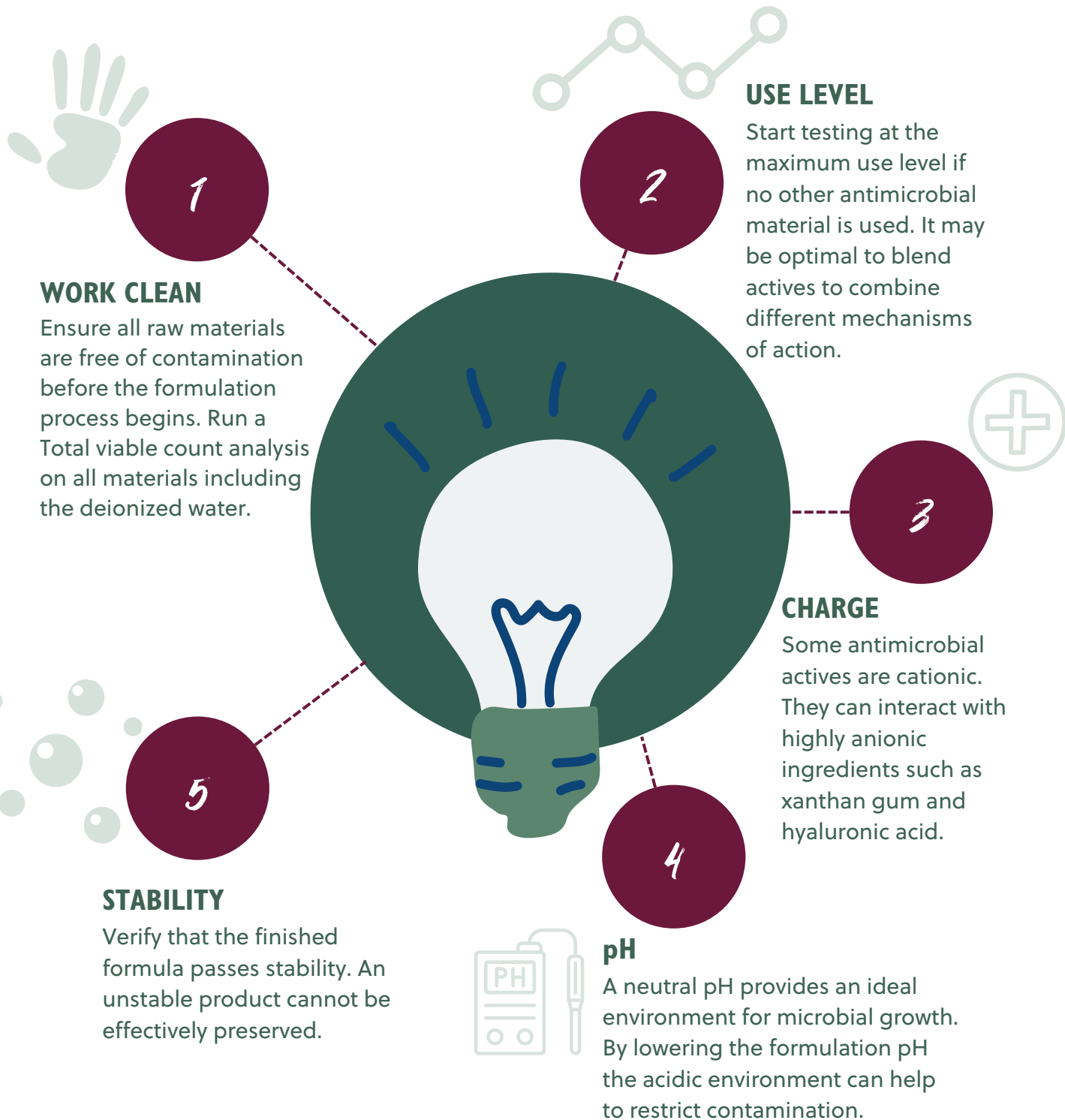
Formulators are often challenged with natural antimicrobials, as they are newer and do not necessarily behave like synthetic preservatives. Likewise, incorporating a natural antimicrobial into a formulation is not a matter of simply removing the synthetic preservative and adding the natural antimicrobial. Formulation techniques need to be tailored to each natural antimicrobial to ensure the product is properly preserved.

Preservatives may have a broader effect on the finished product, altering aesthetics such as color, odor, and viscosity. When formulating with natural antimicrobials, it is important to monitor the antimicrobial closely to control undesired aesthetic changes in the finished product. An important factor to consider when formulating using most natural antimicrobials is broad-spectrum protection. It is not likely that a natural antimicrobial will exhibit the same level of broad-spectrum protection as a synthetic preservative. For this reason, natural antimicrobials often need to be used in conjunction with one another to synergistically produce a broad-spectrum self-preserving system.



HOW TO BE SUCCESSFUL

# FORMULATION TIPS

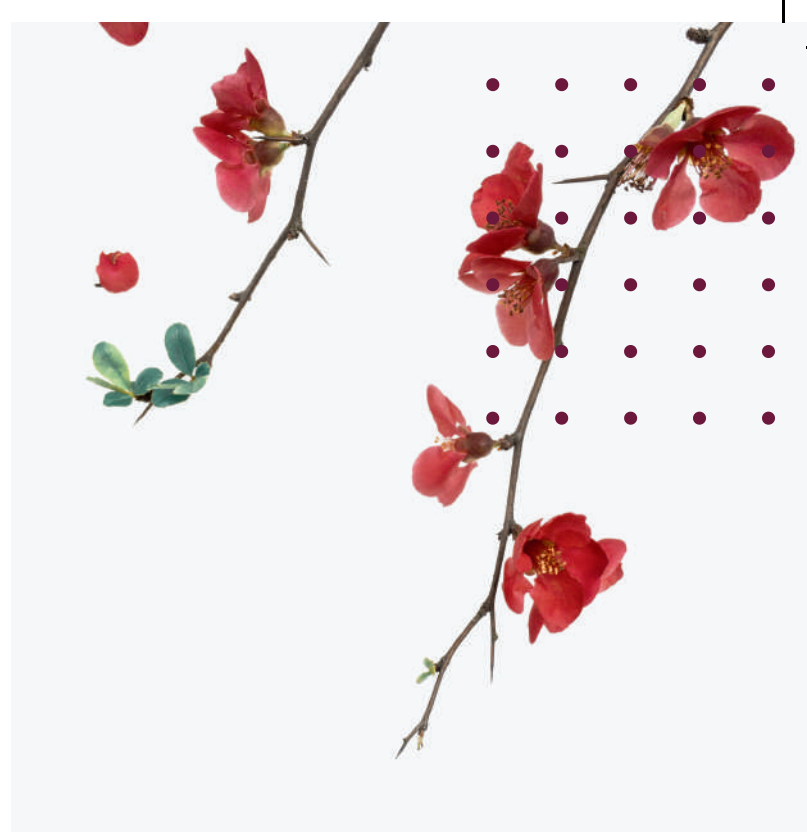


“

**THE BEST WAY  
TO PREDICT THE  
FUTURE IS TO  
CREATE IT**

”

Alan Kay



## FORMULATION GUIDELINES

### AMT PRODUCTS & ANIONIC INGREDIENTS

We have tested compatibility for the following thickeners: Carbomers, Hyaluronic Acid, Carrageenan, and Xanthan Gum for all our cationic ingredients. Please note that the order of addition that provided the best clarity and viscosity can be found in our formulation guide.

### IMPROVING CLARITY OR VISCOSITY STABILITY

In cases where this recommended procedure does not produce the desired viscosity or clarity, add a solubilizing agent and/or salt. Check our formulation guideline for more tips!



### YOUR VOICE MATTERS!

We are here to guide you and help during your journey with our ingredients. Do not hesitate to contact us for more information. We also value your feedback and suggestions.



# DECISION TREE

## BROAD SPECTRUM OR BOOSTER

Do you require a broad spectrum active and/or anti-fungal or booster for specific activity?

## TYPE OF FORMULATION

What is your formulation: an emulsion, a surfactant, hydrosol, gel based or anhydrous? Targeted skin, hair, & claims?

## RESTRICTIONS & NEEDS

Can you use salicylates? Do you have anionic ingredients in your formulation? Do you need a clear formulation?

### ANHYDROUS

Leucidal® SF Max Powder <sup>①</sup>

**For pressed powders:**  
Leucidal® Liquid PT

**For oil:**  
PhytoCide Elderberry OS

### ANTIFUNGAL

AMTicide® Coconut <sup>①</sup>

**For volatile properties:**  
AMTicide® VAF

### BOOSTER

PhytoCide Black Currant Powder

**For problem skin:**  
PhytoCide Aspen Bark Extract Powder <sup>②</sup>

### HAIR

**For scalp care:**  
ProBiocin V™ <sup>①</sup>

### SKIN

**For postbiotics:**  
Leucidal® SF Max <sup>①</sup>  
Leucidal® SF Max Powder <sup>①</sup>

**For problem skin:**  
Leucidal® Liquid <sup>②</sup>

**Formulation friendly:**  
FortiCulture Coconut  
PhytoCide Lichen



<sup>①</sup> Cationic  
<sup>②</sup> Contains Salicylates

# WHAT IF PRESERVATION WAS AN AFTERTHOUGHT?

The increasing popularity of natural and plant-based materials in preservation is notable. As a substitute for synthetic preservatives commonly used, consumers consider these alternatives to be safer and more environmentally friendly.



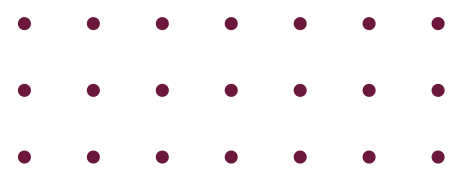
Alternative preservation techniques offer similar functionality and benefits compared to their chemically derived counterparts. However, these techniques must offer benefits beyond antimicrobial activity, as per their definition.



This is an opportunity for the brand to distinguish itself in a crowded marketplace by crafting a compelling narrative around its distinct origin story or leveraging its uncommon manufacturing techniques.



# NEW



## LATEST LAUNCHES

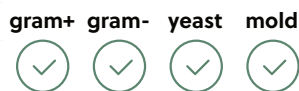
### PhytoCide Lichen

**2,3-Butanediol & Cladonia  
Rangiferina Extract**

A unique active, rich in usnic acid derived from "Cladonia Rangiferina", providing a broad-spectrum protection for cosmetic application with good compatibility in anionic systems.

**Standardised for 0,15-0,30%  
Usnic Acid content.**

**ANTIMICROBIAL /  
ANTIOXIDANT**



M16008



**use level. 2 - 1%  
pH. 3 - 8  
charge. Non-ionic  
T° stability. <25°C**



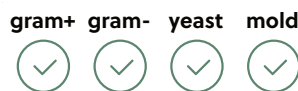
### ProBiocin V™

**Lactobacillus Ferment**

Bacteriocin peptides from the probiotic bacterium "Lactobacillus acidophilus". This active system provides gentle benefits to the skin and scalp, helping to reduce redness and flaking.

**Standardised for 5 - 10%  
bacteriocin content.**

**ANTIMICROBIAL/  
MOISTURIZING / SCALP CARE**



M14005



**use level. 4 - 2%  
pH. 3 - 7  
charge. Cationic  
T° stability. <40°C**



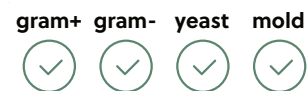
### FortiCulture Coconut

**Water & Cocos Nucifera  
(Coconut) Fruit Extract &  
Saccharomyces Ferment Extract**

FortiCulture Coconut adopts a Cradle to Cradle strategy to minimize waste and leverage natural lipopeptides from fermented coconut oil to enhance skin and maintain integrity of finished products.

**Standardised for 15 - 20%  
lipopeptide content.  
Keratinocyte Expressed  
Proteins >5%**

**ANTIMICROBIAL /  
ANTI-AGING / POSTBIOTIC**



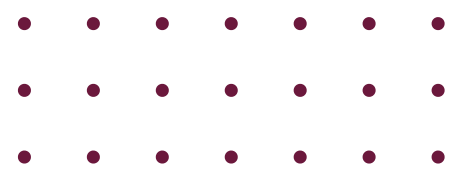
M11001



**use level. 4 - 1%  
pH. 3 - 8  
charge. Non-ionic  
T° stability. <40°C**



# LEUCIDAL



## ANTIMICROBIAL PEPTIDES

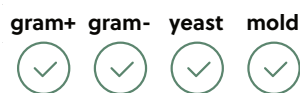
### Leucidal® Liquid

**Aqua & Leuconostoc/Radish  
Root Ferement Filtrate**

Unique peptide with broad spectrum antimicrobial and conditioning properties created by the fermentation of "Leuconostoc kimchii" in a defined growth medium containing radish root.

**Standardised for 18 – 22%  
Natural Salicylate content.  
US Patent. 10,159,708**

**ANTIMICROBIAL /  
MOISTURIZING / ANTI-ACNE**



M15008



**use level. 4 - 2%  
pH. 3 - 8  
charge. Cationic  
T° stability. <70°C**



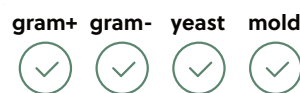
### Leucidal® SF Max

**Lactobacillus Ferment**

Unique peptide derived from "Lactobacillus acidophilus", a probiotic bacterium, cultured in a defined growth medium with cell lysis catalysed by an enzyme. This ferment is salicylate free.

**Standardised for 5 - 10%  
bacteriocin content.  
US Patent. 10,232,197**

**ANTIMICROBIAL /  
MOISTURIZING / POSTBIOTIC**



M150019MAX



**use level. 4 - 2%  
pH. 3 - 7  
charge. Cationic  
T° stability. <40°C**



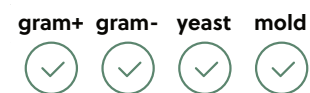
### Leucidal® SF Max Powder

**Lactobacillus Ferment**

This product is a powdered and concentrated version of Leucidal SF Max that is five times more potent. It saves time for formulators while delivering effective results with increased confidence.

**Standardised for 22 - 27%  
bacteriocin content.**

**ANTIMICROBIAL /  
MOISTURIZING / POSTBIOTIC**



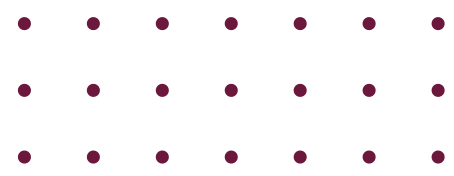
M15031



**use level. 0,5 - 1%  
pH. 3 - 7  
charge. Cationic  
T° stability. <40°C**



# AMTICIDE



## ANTIFUNGAL BOOSTER

### AMTicide® Coconut

**Lactobacillus & Cocos Nucifera  
(Coconut) Fruit Extract**

Created by fermenting "Cocos nucifera (coconut) fruit" with "Lactobacillus" to deliver a non-irritating, anti-fungal and effective multifunctional product. Intended to be coupled with one of our broad-spectrum.

**Standardised for 0.5%  
minimum Lipopeptide content**

**ANTI-FUNGAL /  
MOISTURIZING / POSTBIOTIC**

gram+ gram- yeast mold



M14003



**use level. 4 - 2%  
pH. 3 - 7  
charge. Cationic  
T° stability. <70°C**



### AMTicide® VAF

**Propanediol & Bacillus  
Ferment & Saccharomyces  
Ferment Filtrate**

A natural, volatile anti-fungal solution to prevent microbial growth associated with packaging. Developed by co-fermenting bacteria and yeast in a defined growth media to deliver a non-irritating multifunctional product capable of inhibiting the growth of fungus in packaging head-space.

**ANTI-FUNGAL /  
MOISTURIZING / VOLATILE**

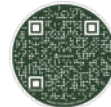
gram+ gram- yeast mold



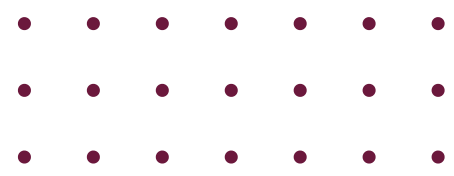
M14004



**use level. max 1%  
pH. 3 - 8  
charge. Cationic  
T° stability. <70°C**



# PHYTOCIDE



## NATURAL ACIDS & MUCH MORE

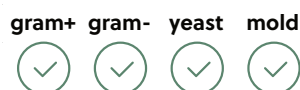
### PhytoCide Black Currant Powder

**Ribes nigrum (Black Currant)  
Fruit Extract**

Black currants are known to be rich in ellagitannins and anthocyanins. This natural, multifunctional, spray dried powder can be used to enhance both antimicrobial and conditioning properties within a formulation.

**Standardised for 1.5 – 4.0%  
Citric Acid content.**

**ANTIMICROBIAL /  
CONDITIONING**



M16001



use level. 3 - 1%  
pH. 3 - 8  
T° stability. <75°C



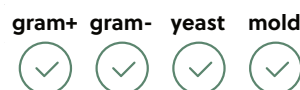
### PhytoCide Aspen Bark Extract Powder

**Populus Tremuloides Bark  
Extract**

Aspen Bark is known to be rich in natural salicylates. These can provide effective antimicrobial activity as well as improving cellular renewal for a smooth and even skin texture.

**Standardised for 54.0 – 60.0%  
Natural Salicylate content.**

**ANTIMICROBIAL /  
MOISTURIZING / ANTI-ACNE**



M16002



use level. 3 - 0.2%  
pH. 3 - 8  
T° stability. <70°C

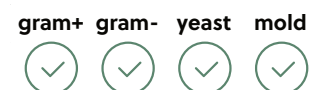


### PhytoCide Elderberry OS

**Sambucus Nigra Fruit Extract**

Elderberries are known to be rich in undecylenic acid and flavonoids. This natural oil-soluble extract can be used to enhance antimicrobial and conditioning properties in oil based formulations which may be at risk of microbial contamination during their life in use.

**ANTIMICROBIAL /  
ANTIOXIDANT / CONDITIONING**



M16003



use level. 5 - 1%  
pH. 3 - 8  
T° stability. <75°C  
**OIL SOLUBLE**





A speciality ingredients company able to conceptualise, manufacture and locally supply raw materials. With commitment to assessing, sourcing and creating innovative products, we harness the latest technology to deliver value added benefits. Our key technologies include Bio-fermentation, Complex Actives, Extracts, Proteins, Delivery Systems, and Functional actives.

[www.activeconceptsllc.com](http://www.activeconceptsllc.com)



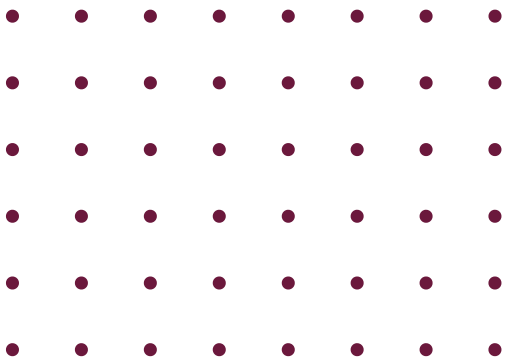
An online supplier of specialty ingredients for personal care. Offering extracts and actives to meet the needs of both formulators and manufacturers. Unlike most suppliers, who have MOQs, we offer the flexibility to purchase the exact amount of product needed. The perfect supply partner for indie brands, start-ups and cosmetic formulating enthusiasts!

[www.formulatorsampleshop.com](http://www.formulatorsampleshop.com)



USDA-NOP certified organic cosmetic ingredient company, providing the first true cosmetic-grade, Phytogenetix™ verified organic ingredients for the cosmetic industry. Successfully merging the desire for organics with the utility of actives to surpass the demands and constraints faced by today's formulators.

[www.arbor-organics.com](http://www.arbor-organics.com)



**DISCOVER OUR  
FAMILY**

**13.**

WHAT IF PRESERVATION  
WAS AN AFTERTHOUGHT?



**ACTIVE MICRO**  
TECHNOLOGIES

[WWW.ACTIVEMICROTECHNOLOGIES.COM](http://WWW.ACTIVEMICROTECHNOLOGIES.COM)

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