

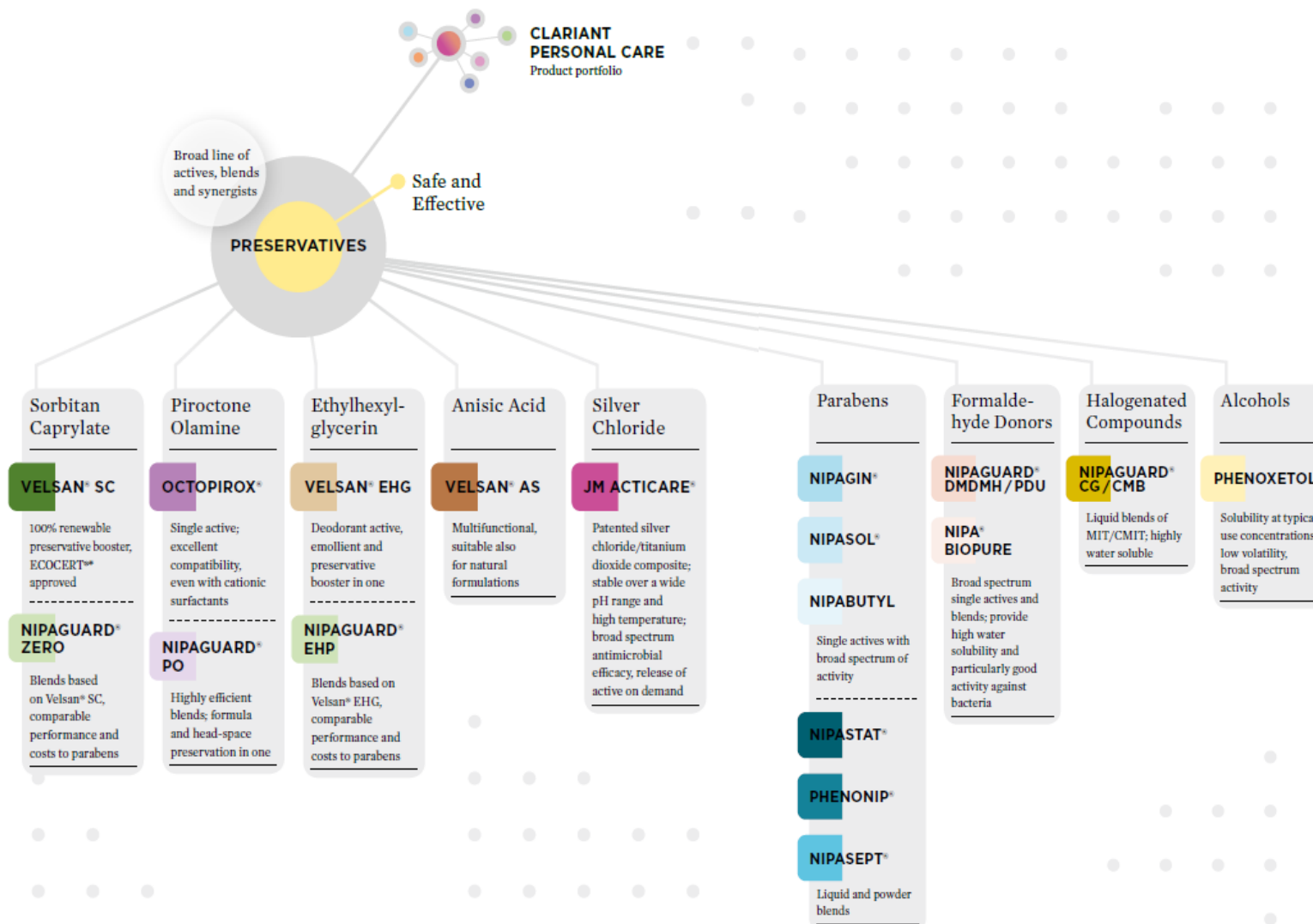
**CLARIANT** 

# Personal Care **PRESERVATIVES**

Uncover the  
**SECRET CODE  
OF BEAUTY**

what is precious to you?

# A wide range of solutions for your personal care preservation needs














# Velsan® SC

ECOCERT® approved, 100% renewable, natural derived preservative booster. Preserve more with less.

A synergistic efficacy booster for preservative systems, which is not listed as a preservative\* and can be used globally and as a multifunctional co-emulsifying agent for cosmetic formulations.



















Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
										G-	G+	Y	M	
<b>Single Active</b>			  								G-	G+	Y	M
Velsan® SC (Ecocert® approved)	Sorbitan Caprylate	Liquid	  	4.0-8.0	<80°C	0.5-2.0	NA	NA	NA		0	++	+	+

: Leave-on / : Rinse-off / : Wet wipes  
 G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
 ++: good / +: medium / 0: none  
 NA: Not Applicable




# Nipaguard® Zero Blends

- 0% parabens, 100% performance

Preservative blends based on 100% renewable Velsan® synergistic booster to efficiently protect your formulation. Nipaguard® Zero blends represent a trusted alternative to parabens, halogenated preservatives and formaldehyde-donors and provide comparable cost and performance. They enable an efficient use of consumer accepted preservatives at low concentrations, broad spectrum preservation and are more effective.

Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU* (%)	US (%)	JP* (%)	microbiological efficacy				
										G-	G+	Y	M	
<b>Blends-Liquid</b>														
			  											
Nipaguard® SCE (EcoCERT® approved)	Sorbitan Caprylate (and) Propanediol (and) Benzoic Acid	Liquid	  	4.0-6.5	<80 °C	0.5-1.5	3.1	no restrictions	1.3	++	++	++	++	
Nipaguard® SCM	Sorbitan Caprylate (and) Propylene Glycol (and) Methylisothiazolinone	Liquid	  	4.5-8.0	<40 °C	0.5-1.5	1.8	no restrictions	1.8	++	++	++	++	
Nipaguard® SCP	Phenoxyethanol (and) Sorbitan Caprylate	Liquid	  	4.5-8.5	<80 °C	0.5-1.0	1.4	considered safe	1.4	++	++	++	++	
Nipaguard® SCV	Sorbitan Caprylate (and) Phenoxyethanol (and) Benzyl Alcohol (and) Benzoic Acid	Liquid	  	4.0-8.0	<40 °C	0.5-1.0	3.3	considered safe	1.5	++	++	++	++	
Nipaguard® EHP	Phenoxyethanol (and) Ethylhexylglycerin	Liquid	  	3.5-8.0	<80 °C	0.5-1.0	1.1	considered safe	1.1	++	++	++	++	







\*Maximum allowed use concentration for blends are calculated according to requirements of the listed ingredient at highest concentration in the blend. The regulations of China, ASEAN and Brazil state the same maximum allowed use levels as EU in most cases. Please check local regulations as needed. Per Cosmetic Regulation (EC) 1223/2009 Annex V.

: Leave-on / : Rinse-off / : Wet wipes  
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++: good / +: medium / 0: none  
NA: Not Applicable




# Octopirox<sup>®</sup>

- A reliable well-known source

Piroctone Olamine is known under the trade name Octopirox<sup>®</sup> as a highly effective preservative and antidandruff agent. It has been successfully used for over 30 years for its good compatibility, its antimicrobial functionality and its long shelf life. It is generally considered safe, non-irritating and non-allergenic.













Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
										G-	G+	Y	M	
Single Active			  											
Octopirox <sup>®</sup>	Piroctone Olamine	Powder	  	4.0-10.0	<80°C	0.05-0.1	1.0* 0.5**	no restrictions	0.05	++	++	++	++	




\*Rinse-off \*\*All others

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++: good / +: medium / 0: none  
NA: Not Applicable

# Nipaguard® PO Blends

- Broad spectrum of efficacy over a wide pH range
- Nipaguard® PO blends deliver superior performance compared to other market standards. Derived from Piroctone Olamine, these highly efficient blends provide you with an all-in-one preservation – from formula to headspace. They are easy to handle and process.







Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
										G-	G+	Y	M	
<b>Blends-Liquid</b>														
			  											
Nipaguard® PO5	Phenoxyethanol (and) Piroctone Olamine	Liquid	  	4.0-10.0	<80°C	0.3-1.0	1.0	1.0	1.0	++	++	++	++	
Nipaguard® POB	Phenoxyethanol (and) Benzoic Acid (and) Piroctone Olamine	Liquid	  	4.0-6.0	<80°C	0.3-1.0	1.2	1.2	1.0	++	++	++	++	
Nipaguard® POM	Phenoxyethanol (and) Methylparaben (and) Piroctone Olamine	Liquid	  	4.0-8.0	<80°C	0.3-1.0	1.2	1.2	1.0	++	++	++	++	




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NA: Not Applicable

# Velsan<sup>®</sup> EHG

- Multi-functional ingredient usable as deodorant active, emollient and preservative booster.

Multi-functional ingredient suitable for natural formulations. Velsan<sup>®</sup> EHG can be used in a broad range of cosmetic applications from pH 2-12. It is a skin care additive acting as an emollient and as an active in deodorants. Its boosting effect enables lower concentrations of the preservatives in cosmetic formulations.







Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
Single Active			  								G-	G+	Y	M
Velsan <sup>®</sup> EHG	Ethylhexylglycerin	Liquid	  	2.0-12.0	<80 °C	0.3-1.0	NA	NA	NA		+	++	+	+




: Leave-on / : Rinse-off / : Wet wipes  
G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
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NA: Not Applicable



# Velsan<sup>®</sup> AS






- Multi-functional ingredient suitable for natural formulations
- p-Anisic acid is an organic acid found in nature which has antiseptic properties and therefore provides a microbial effect. It is a known fragrance ingredient that is not listed as preservative, yet offers anti-microbial efficacy. It shows excellent performance in rinse-off and leave-on cosmetics at pH < 5.5. It is readily biodegradable.




Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
Single Active			  								G-	G+	Y	M
Velsan <sup>®</sup> AS	p-Anisic Acid/Perfume	Powder	  	<6.0	<80 °C	0.2-0.4	NA	NA	NA		+	+	+	+

: Leave-on / : Rinse-off / : Wet wipes  
 G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
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# JM Acticare®

- Patented silver preservation with broad spectrum antimicrobial efficacy
- JM ActiCare®'s activity derives from an inorganic composite which allows the slow release of antimicrobial silver ions on demand. It is highly stable over a wide pH range and effective at temperatures up to 100 ° C.

Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU* (%)	US (%)	JP (%)	microbiological efficacy			
										G-	G+	Y	M
<b>Blends</b>			  										
JM ActiCare®	Silver Chloride (and) Titanium Dioxide (and) Diethylhexyl Sodium Sulfosuccinate (and) Propylene Glycol	Liquid		3.0-12.0	100 °C	0.05-0.18	0.19	listed TSCA	not permitted	++	++	++	++
JM ActiCare® P	Silver Chloride (and) Titanium Dioxide	Powder		3.0-12.0	100 °C	0.05-0.18	0.19	listed TSCA	not permitted	++	++	++	++













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G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
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NA: Not Applicable




\*Not permitted for children under age of 3 years.

# Parabens

- Quality and effectiveness

Clariant offers a wide range of parabens for all personal care applications. Their well-known solubility, their broad spectrum of activity against bacteria and fungi as well as their effectiveness at low concentrations still make them the most widely used preservatives in personal care products. Single actives Nipagin<sup>®</sup> and Nipasol<sup>®</sup> are also available as sodium salts to enable introduction without heating or pre-dissolving in solvents.

Product	INCI	Form	Applications	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
										G-	G+	Y	M	
<b>Single Actives</b>														
Nipagin <sup>®</sup> M (also sodium salt and 200 Mesh)	Methylparaben	Powder	  	4.0-8.0	<80°C	0.1-0.3	0.4	0.4	1.0	0	+	++	++	
Nipagin <sup>®</sup> A (also sodium salt and 200 Mesh)	Ethylparaben	Powder	  	4.0-8.0	<80°C	0.1-0.3	0.4	0.4	1.0	0	+	++	++	
Nipasol <sup>®</sup> M (also sodium salt and 200 Mesh)	Propylparaben	Powder	  	4.0-8.0	<80°C	0.1-0.3	0.1*	0.4	1.0	0	+	++	++	
Nipabutyl	Butylparaben	Powder	  	4.0-8.0	<80°C	0.1-0.3	0.1*	0.4	1.0	0	+	++	++	

: Leave-on / : Rinse-off / : Wet wipes  
G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
++: good / +: medium / 0: none  
NA: Not Applicable

# Parabens














Product	INCI	Form	Applications			pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy			
<b>Blends</b>															
Nipastat®	Methylparaben (and) Ethylparaben (and) Propylparaben (and) Butylparaben (and) Isobutylparaben	Powder	●	●	●	4.0–8.0	<80 °C	0.05–0.3	not permitted	cons. safe	1.0	0	+	++	++
Nipasept® (also sodium salt)	Methylparaben (and) Ethylparaben (and) Propylparaben	Powder	●	●	●	4.0–8.0	<80 °C	0.05–0.3	0.8*	cons. safe	1.0	0	+	++	++
Nipaguard® MPA	Benzyl Alcohol (and) Methylparaben (and) Propylparaben	Liquid				4.5–8.0	40 °C	0.3–0.8	1.3*	6.5	not permitted	++	++	++	++
Phenonip®	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben (and) Butylparaben (and) Isobutylparaben	Liquid	●	●	●	3.0–8.0	<80 °C	0.25–1.0	not permitted	cons. safe	1.3	++	++	++	++
Phenonip® P4	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben (and) Butylparaben	Liquid	●	●	●	3.0–8.0	<80 °C	0.25–1.0	1.3*	cons. safe	1.3	++	++	++	++
Phenonip® XB	Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Propylparaben	Liquid	●	●	●	3.0–8.0	<80 °C	0.25–1.0	1.4*	cons. safe	1.4	++	++	++	++
Phenonip® ME	Phenoxyethanol (and) Methylparaben (and) Ethylparaben	Liquid	●	●	●	3.0–8.0	<80 °C	0.25–1.2	1.3	cons. safe	1.3	++	++	++	++




\*Not permitted for children nappy area leave-on.

# Formaldehyde Donors

- Highly effective at very low concentrations

The following broad spectrum formaldehyde donor products provide high water solubility and particularly good activity against bacteria.













Product	INCI	Form	Applications   	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
										G-	G+	Y	M	
<b>Single Actives</b>														
Nipaguard® DMDMH	DMDM Hydantoin	Liquid	  	3.0-8.0	<60°C	0.15-0.4	1.1	cons. safe	0.5		++	++	+	+
Nipa® Biopure 100	Imidazolidinyl Urea	Powder	 	3.0-8.5	<40°C	0.1-0.3	0.6	cons. safe	0.3		++	++	+	+
Nipa® Biopure 200	Diazolidinyl Urea	Powder	 	3.0-8.5	<40°C	0.1-0.3	0.5		0.5	not permitted	++	++	+	+
<b>Blend-Liquid</b>														
Nipaguard® PDU	Propylene Glycol (and) Methylparaben (and) Propylparaben (and) Diazolidinyl Urea	Liquid	  	3.0-8.0	<40°C	0.3-1.0	1.5		1.42	not permitted	++	++	++	++

: Leave-on / : Rinse-off / : Wet wipes  
G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
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NA: Not Applicable

# Halogenated Compounds




- Broad spectrum blends

Clariant's offerings are optimized blends that deliver broad spectrum efficacy with the lowest possible concentrations of listed preservatives.

Product	INCI	Form	Applications   	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy			
										G-	G+	Y	M
<b>Blends-Liquid</b>													
Nipaguard® CG	Methylchloroisothiazolinone (and) Methylisothiazolinone	Liquid	  	<9.0	<50°C	0.05-0.1	0.1*	0.1	0.1*	++	++	++	++
Nipaguard® CMB	Triethylene Glycol, Benzyl Alcohol, Propylene Glycol, Methylchloroisothiazolinone and Methylisothiazolinone	Liquid	  	<8.0	<40°C	0.03-0.15	0.2*	0.2	not permitted	++	++	++	++
Nipaguard® BPX	Phenoxyethanol (and) Methylparaben (and) Propylparaben (and) 2-Bromo-2-nitropropane-1,3-diol	Liquid	  	4.5-8.5	<40°C	0.3-0.7	1.3**	2.0	not permitted	++	++	++	++



\*Rinse-off only




\*\*Not permitted for children nappy area leave-on.

: Leave-on / : Rinse-off / : Wet wipes  
G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
++: good / +: medium / 0: none  
NA: Not Applicable

# Alcohols

- Versatile preservative over a wide range of applications  
Phenoxetol® has particularly good performance on gram-negative and gram-positive bacteria, but also against yeast and molds. It is typically non-irritating to the skin at allowed use concentrations, has low volatility at ambient temperatures and is soluble at typical use concentrations (approx. 2.4 % soluble in water).

Product	INCI	Form	Applications 	pH range	max. temp.	rec. use level (%)	EU (%)	US (%)	JP (%)	microbiological efficacy				
										G-	G+	Y	M	
Single Active														
Phenoxetol®	2-Phenoxyethanol	Liquid		3.5-8.0	<80 °C	0.5-1.0	1.0	cons. safe	1.0	++	+	0	0	

: Leave-on / : Rinse-off / : Wet wipes  
G-: Gram- Bacteria / G+: Gram+ Bacteria / Y: Yeast / M: Mold  
++: good / +: medium / 0: none  
NA: Not Applicable

# Disclaimer

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