

# responsible antimicrobial solutions for baby care

trade name INCI	biodegradable	features and benefits	pH value	rec. use conc. in %	applications			acc. EU Cosmetics Regulation	acc. CIR (USA)	acc. ASEAN Cosmetic Directive	Technical Safety Standards for Cosmetics (TSSC 2015) (China)	acc. Mercosur
					leave-on	rinse-off	wet wipes					
<b>euxyl™ k 701</b> preservative INCI: Phenoxyethanol (and) Benzoic Acid (and) Dehydroacetic Acid (and) Ethylhexylglycerin		<ul style="list-style-type: none"> <li>optimized blend boosted by ethylhexylglycerin</li> <li>ideal mild solution for wet wipes</li> </ul>	≤6	0.4 - 1.2	+++	+++	+++	max. 1.26%	max. 1.26%	max. 1.26%	max. 1.26%	max. 1.26%
<b>euxyl™ k 703</b> preservative INCI: Phenoxyethanol (and) Benzoic Acid (and) Dehydroacetic Acid		<ul style="list-style-type: none"> <li>market-leading blend of organic acids and aromatic alcohol</li> <li>highly cost effective</li> <li>ideal for all wet wipe formulations</li> </ul>	≤6	0.4 - 1.2	+++	+++	+++	max. 1.23%	max. 1.23%	max. 1.23%	max. 1.23%	max. 1.23%
<b>optiphen™ bsp</b> preservative (North America)   <b>rokonsal™ bsp</b> preservative (Rest of World) INCI: Phenoxyethanol (and) Benzoic Acid (and) Sorbic Acid (and) Propylene Glycol		<ul style="list-style-type: none"> <li>blend of organic acids and phenoxyethanol</li> <li>cost effective</li> <li>ideal for all wet wipe formulations</li> </ul>	≤5.5	0.3 - 1.0	+++	+++	++	max. 2.50%	max. 2.50%	max. 2.50%	max. 2.50%	max. 2.50%
<b>euxyl™ k 720</b> preservative INCI: Propylene Glycol (and) Benzoic Acid (and) Caprylyl Glycol		<ul style="list-style-type: none"> <li>aromatic alcohol-free blend with caprylyl glycol</li> <li>provides skin moisturization</li> <li>no discoloration risk</li> <li>ideal for face and sun care formulations</li> </ul>	≤5.5	1.0 - 2.0	+++	+++	+++	max. 2.50% (leave-on) max. 12.50% (rinse-off)	max. 25.00%	max. 2.50% (leave-on) max. 12.50% (rinse-off)	max. 2.50%	max. 2.50% (leave-on) max. 12.50% (rinse-off)
<b>euxyl™ k 830</b> preservative INCI: Phenoxyethanol (and) Ethylhexylglycerin (and) Octenidine HCl		<ul style="list-style-type: none"> <li>optimized blend with strong fungicidal effect</li> <li>contains ethylhexylglycerin as performance booster</li> <li>contributes to in-process production hygiene</li> <li>designed for challenging formulations</li> </ul>	≤12	0.5 - 1.0	+++	+	+++	max. 1.11%	max. 1.11%	max. 1.11%	—	max. 1.11%
<b>euxyl™ pe 9010</b> preservative INCI: Phenoxyethanol (and) Ethylhexylglycerin		<ul style="list-style-type: none"> <li>market-leading preservative blend</li> <li>contains ethylhexylglycerin as performance booster</li> <li>proven to being microbiome gentle</li> <li>designed for all leave-on formulations</li> </ul>	≤12	0.5 - 1.0	+++	+	+++	max. 1.11%	max. 1.11%	max. 1.11%	max. 1.11%	max. 1.11%
<b>optiphen™</b> preservative INCI: Phenoxyethanol (and) Caprylyl Glycol		<ul style="list-style-type: none"> <li>blend with reduced aromatic alcohol content</li> <li>provides skin moisturization</li> <li>compatible with ethoxylated surfactants</li> <li>ideal for leave-on formulations</li> </ul>	≤12	0.5 - 1.5	+++	++	+++	max. 1.79%	max. 1.79%	max. 1.79%	max. 1.79%	max. 1.79%
<b>optiphen™ 200</b> preservative INCI: Phenoxyethanol (and) Caprylyl Glycol		<ul style="list-style-type: none"> <li>well-balanced blend</li> <li>provides skin moisturization</li> <li>compatible with ethoxylated surfactants</li> <li>ideal for leave-on formulations</li> </ul>	≤12	0.5 - 1.3	+++	++	+++	max. 1.35%	max. 1.35%	max. 1.35%	max. 1.35%	max. 1.35%

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						leave- on	rinse- off	wet wipes					
progressive preservatives	<b>optiphen™ plus</b> preservative INCI: Phenoxyethanol (and) Caprylyl Glycol (and) Sorbic Acid		<ul style="list-style-type: none"> <li>blend with strong antifungal properties</li> <li>contains caprylyl glycol</li> <li>provides skin moisturization</li> <li>compatible with ethoxylated surfactants</li> <li>ideal for leave-on formulations</li> </ul>	≤6	0.5 - 1.5	+++	+++	+++	max. 1.91%	max. 1.91%	max. 1.91%	max. 1.91%	max. 1.91%
	<b>effisin™ pe 5</b> preservative INCI: Phenoxyethanol		<ul style="list-style-type: none"> <li>market-leading preservative</li> <li>vapor phase activity</li> <li>ideal for all formulations</li> <li>contains 5 ppm phenol</li> </ul>	≤12	max. 1.0	++	++	++	max. 1.00%	max. 1.00%	max. 1.00%	max. 1.00%	max. 1.00%
multifunctional	<b>sensiva™ pa 20</b> multifunctional INCI: Phenethyl Alcohol (and) Ethylhexylglycerin (and) Tocopherol		<ul style="list-style-type: none"> <li>multifunctional blend boosted by ethylhexylglycerin</li> <li>appealing rose-like odor</li> <li>ideal for leave-on formulations</li> </ul>	≤12	0.5 - 1.1	+++	+	++	no restrictions for the use in cosmetics	max. 1.11%	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	max. 1.11%
	<b>sensiva™ pa 30</b> multifunctional INCI: Propanediol (and) Phenethyl Alcohol (and) Undecyl Alcohol (and) Tocopherol		<ul style="list-style-type: none"> <li>multifunctional blend boosted by undecyl alcohol</li> <li>appealing rose-like odor</li> <li>ideal for neutral rinse-off formulations</li> </ul>	≤12	1.0 - 2.0	+++	+++	++	no restrictions for the use in cosmetics	max. 2.85%	no restrictions for the use in cosmetics	—	max. 2.85%
	<b>sensiva™ pa 40</b> multifunctional INCI: Phenylpropanol (and) Propanediol (and) Caprylyl Glycol (and) Tocopherol		<ul style="list-style-type: none"> <li>powerful multifunctional blend boosted by caprylyl glycol</li> <li>contains natural ingredients</li> <li>provides moisturizing and emolliency</li> <li>appealing floral scent</li> <li>designed for challenging leave-on formulations, e.g. sun care</li> </ul>	≤12	0.5 - 1.5	+++	++	++	no restrictions for the use in cosmetics	safe as used	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
	<b>sensiva™ sc 10</b> multifunctional INCI: Ethylhexylglycerin (and) Caprylyl Glycol		<ul style="list-style-type: none"> <li>multifunctional ingredient boosted by ethylhexylglycerin</li> <li>booster for antimicrobials</li> <li>provides moisturizing and emolliency</li> <li>ideal for leave-on formulations</li> </ul>	≤12	0.5 - 2.0	+++	+	+++	no restrictions for the use in cosmetics	max. 6.66% (leave on) max. 7.14% (rinse-off)	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
	<b>sensiva™ sc 50</b> multifunctional INCI: Ethylhexylglycerin		<ul style="list-style-type: none"> <li>market-leading multifunctional ingredient</li> <li>skin care additive and emollient</li> <li>booster for antimicrobials</li> <li>ideal for all leave-on formulations</li> </ul>	≤12	0.3 - 1.0	+++	+	+++	no restrictions for the use in cosmetics	max. 2.0% (leave on) max. 8.0% (rinse-off)	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
	<b>optiphen™ od</b> multifunctional INCI: Caprylyl Glycol		<ul style="list-style-type: none"> <li>well-known multifunctional ingredient</li> <li>adds to microbial stability</li> <li>provides moisturizing and emolliency</li> <li>ideal for all leave-on formulations</li> </ul>	≤12	0.3 - 2.0	+++	++	+++	no restrictions for the use in cosmetics	max. 5.00%	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
	<b>effisin™ hd</b> multifunctional INCI: 1,2-Hexanediol		<ul style="list-style-type: none"> <li>well-known multifunctional ingredient</li> <li>adds to microbial stability</li> <li>provides moisturizing and emolliency</li> <li>ideal for leave-on formulations</li> </ul>	≤12	0.5 - 3.0	+++	++	+++	no restrictions for the use in cosmetics	(max. 10%) safe as used	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
	<b>effisin™ pg</b> multifunctional INCI: Pentylene Glycol		<ul style="list-style-type: none"> <li>well-known multifunctional ingredient</li> <li>adds to microbial stability</li> <li>provides moisturizing and emolliency</li> <li>ideal for face care formulations</li> </ul>	≤12	1.0 - 5.0	++	++	++	no restrictions for the use in cosmetics	safe as used	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
	<b>phyteq™ raspberry i</b> multifunctional INCI: Raspberry Ketone		<ul style="list-style-type: none"> <li>strong antioxidant and free radical scavenger benefits</li> <li>improves skin biology - anti-inflammation claim ex vivo</li> <li>ideal for leave-on formulations</li> </ul>	≤8	0.3 - 1.0	+++	++	++	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
<b>phyteq™ raspberry one</b> multifunctional INCI: Phenylpropanol (and) Propanediol (and) Raspberry Ketone		<ul style="list-style-type: none"> <li>innovative liquid blend of multifunctional ingredients with strong fungicidal efficacy</li> <li>perfect choice for difficult to preserve leave-on formulations such as sunscreens and pigmented emulsions</li> <li>remarkable antioxidant and well-aging properties</li> </ul>	≤8	0.5 - 2.0	+++	++	++	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	

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					leave- on	rinse- off	wet wipes					
<b>euxyl™ k 712</b> preservative <sup>1</sup> INCI: Sodium Benzoate (and) Potassium Sorbate (and) Aqua (Water)		<ul style="list-style-type: none"> <li>market-leading organic acid blend</li> <li>cost-effective allrounder</li> <li>ideal for certified natural formulations: COSMOS &amp; NaTrue compliant</li> <li>ready-to-process liquid</li> </ul>	≤5.5	0.5 - 1.5	+++	+++	++	max. 1.96% (leave-on) max. 5.35% (rinse-off)	max. 3.33%	max. 1.96% (leave-on) max. 5.35% (rinse-off)	max. 1.96%	max. 1.96% (leave-on) max. 5.35% (rinse-off)
<b>sensiva™ go natural</b> multifunctional INCI: Caprylyl Glycol (and) Glyceryl Caprylate (and) Propanediol		<ul style="list-style-type: none"> <li>100% natural multifunctional ingredients acc. to ISO16128</li> <li>provides moisturizing, emolliency and re-fatting</li> <li>HRIPT tested: ideal for demanding skin</li> <li>designed for certified natural formulations: COSMOS validated</li> </ul>	≤7	0.5 - 2.0	+++	+	+++	no restrictions for the use in cosmetics	max. 5.00%	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
<b>effisin™ cg natural</b> multifunctional INCI: Caprylyl Glycol		<ul style="list-style-type: none"> <li>100% natural multifunctional ingredient acc. to ISO16128</li> <li>provides moisturizing and emolliency</li> <li>compares to synthetic caprylyl glycol</li> <li>ideal for certified natural formulations: COSMOS validated</li> </ul>	≤12	0.3 - 2.0	+++	++	+++	no restrictions for the use in cosmetics	max. 5.00%	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics
<b>effisin™ pg natural</b> multifunctional INCI: Pentylene Glycol		<ul style="list-style-type: none"> <li>100% natural multifunctional ingredient acc. to ISO16128</li> <li>provides moisturizing and emolliency</li> <li>compares to synthetic pentylene glycol</li> <li>ideal for certified natural formulations: COSMOS validated</li> </ul>	≤12	1.0 - 5.0	++	++	++	no restrictions for the use in cosmetics	(max. 5.00%) safe as used	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics	no restrictions for the use in cosmetics

1) Synthetically produced to be identical to a natural substance.

Getting into the routine of caring for a baby can be a challenge. Making sure it is warm, fed, and clothed are the minimum basic imperatives, but most parents go beyond and look for the healthiest possible options. This, of course, extends to cleansing and care products. In the interest of best care practices, careful consideration must be given here due to the unique state of infant skin. At this early stage of development, their skin is immature, delicate, and very reactive to ingredients which may be present in soaps, lotions, powders, ointments and other topical care products.

On a physiological level, with a pH value of 6.5 - 7, baby's skin deviates significantly from the "acid mantle" of adults. Additionally, the thinner stratum corneum and epidermis, and a lower water holding capacity, call for carefully selected ingredients that are compatible with and acceptable for use on baby skin.

With a strong focus on mildness, protection, and moisturization, many of our antimicrobials exceed the basic safety expectation of baby personal care products. We have set a high standard for ourselves: to make our responsible antimicrobial solutions for baby care safe, effective, and beneficial to delicate infant skin.

With this in mind, for our baby care formulation recommendations, we have chosen only products known to be free from:

- any ingredients which are known to be or can release carcinogens, mutagens/genotoxins, reproductive/developmental toxins, or endocrine disruptors
- any ingredients which are known or expected sensitizer
- any ingredients which can be classified as halogen organic compounds

## definitions

### biodegradable

Has attained a sufficient level of biodegradation that meets the requirements for 'ready' or 'inherent' according to OECD or related methods such as, 301, 302, or 306, or product has been assessed as being biodegradable based on a read-across to a chemical with similar structure or the product components have been analyzed for biodegradation potential





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