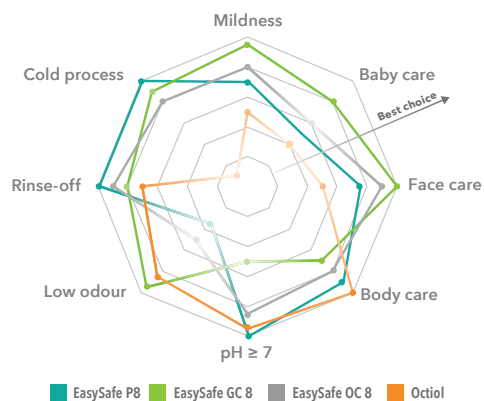


Specifications and Characteristics

NAME	EASYSAFE P8	EASYSAFE GC 8	EASYSAFE OC 8	OCTIOL
INCI	Caprylyl Glycol, Phenyl-propanol, Water	Caprylyl Glycol, Glycerol, Glyceryl Caprylate/ Caprate, Glycerin	Caprylyl Glycol, Phenyl-propanol, o-Cymen-5-ol, Water	Caprylyl Glycol
MELTING POINT	< 5 °C	< - 10 °C	< - 10 °C	35°C
ASPECT	Liquid, almost colorless	Liquid, slightly colored	Liquid, almost colorless	Solid or liquid, white / colorless
ODOUR	Faint, aromatic	Faint, characteristic	Faint, aromatic	Faint, characteristic
WATER SOLUBILITY (20°C)	0.9%	< 0.1%	0.4%	0.8%
pH OF USE	3.0 ▶ 10.0	4.0 ▶ 7.0	3.0 ▶ 8.0	3.0 ▶ 10.0
USE LEVEL	0.5 ▶ 2.0%	0.75 ▶ 2.0%	0.5 ▶ Max. 1.5%	0.2 ▶ 1.0%
COLD PROCESS	Yes	Yes	Yes	No
MICROBICIDE EFFECT	Yeast/mold/ bacteria	Yeast/mold/ bacteria	Yeast/mold/ bacteria	Yeast/mold/ bacteria
PRESERVATIVE FREE	Yes	Yes	No	Yes

EasySafe selector



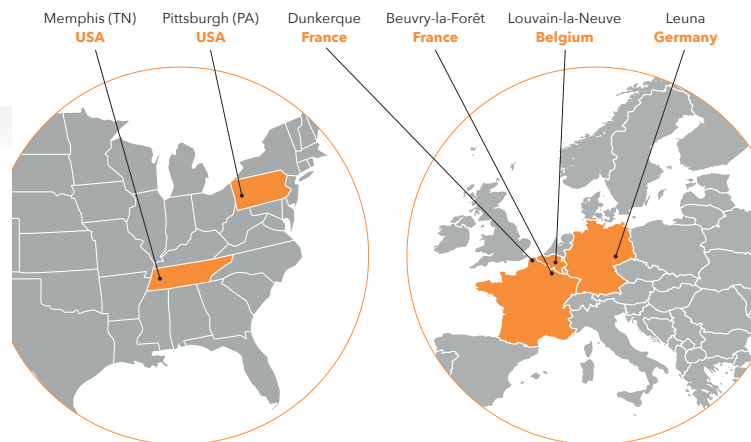
The above information is accurate to the best of our knowledge. Customers are advised to make their own studies on the usefulness of any ingredient for a particular application. Recommended usage information is only provided as indication and should not be considered as recommendations to use Minasolve SAS's products in violation of any laws, patents, or official regulations dealing with manufacture, composition, local procedures, product design, or end usage.

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Created in 2004, **The MINAFIN® Group**, specializes in fine chemistry for the life sciences and high tech industries. Activities include industrial subcontracting, development of chemical syntheses and industrial scale-up of custom-made processes as well as proprietary products with high added value for the pharmaceutical, cosmetics, agriculture and high-tech industries. Strong synergies exist between all business units: MINASOLVE, MINAKEM, MINAGRO, PENNAKEM, PRESSURE CHEMICALS, MINASCENT and EcoXtract.

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- ▶ Improving our chemistry and operational excellence today
- ▶ Creating and innovating for tomorrow
- ▶ Driving our enterprises together to go beyond expectations



220
M€ SALES

888
EMPLOYEES

87
SCIENTISTS

6
PRODUCTION SITES

MINAFIN®
GROUP

2020.03. V3.1

EASYSAFE OC 8 - P8 - GC 8

ECO-FRIENDLY & COST-EFFECTIVE SYNERGISTIC SOLUTIONS FOR OPTIMUM ANTIMICROBIAL PROTECTION

- ✓ **Optimized for high performance**
- ✓ **Efficient at low dosage**
- ✓ **Versatile and easy to use**

MINASOLVE®
BIO-INGREDIENTS FOR YOUR APPLICATIONS

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solving
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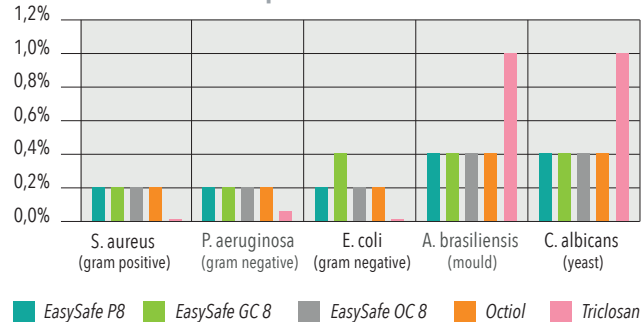
EasySafe P8, GC 8, OC 8 from Minasolve: A TOOLBOX OF THREE PERFORMANCE SOLUTIONS

For cost effective antimicrobial protection

Safety is key in the design of consumer products, regardless of their sales price. Minasolve therefore offers three economical solutions for alternative formula protection. **EasySafe P8**, **EasySafe GC 8** and **EasySafe OC 8** are all based on the cost-effective multifunctional ingredient **Caprylyl Glycol (Octiol)**.

All three solutions are temperature-stable, effective at low dosage, versatile and easy to use liquids. They are based on safe, mild and undisputed components, they are readily biodegradable and suitable for "clean labelling" (halogen-free, paraben-free, formaldehyde-free ...). Having a wider antimicrobial spectrum than Triclosan, these three EasySafe blends can be considered safe alternatives.

MIC compared with Triclosan



Optimized for wet wipes protection

EasySafe P8, GC 8 and OC 8 have been subjected to challenge tests on wet wipes in accordance with the Pharm. Eur. protocol.

- ▶ **EasySafe OC 8** and **P8** effectively preserve wet wipes at **1% use-level** (criteria A).
- ▶ The recommended use-level for **EasySafe GC 8** is **1.5%**.

Tested wipes: Ascuteq, 50 g/m² airlaid, 92% total chlorine free (TCF) cellulose + 8% ethylene/vinyl acetate binder.

Wet wipes liquid: 91-94% water, 5-8% Natragem S140 NP, 1% EasySafe Blend, pH = 5.5 adjusted with citric acid.

Performance in microbial challenge tests

Phase	Raw material	INCI name	%
A	Demineralized Water	Aqua	ad 100
	Xanthan Gum N ⁽²⁾	Xanthan Gum	0.5
B	Emulgade PL 68/50 ⁽³⁾	Cetearyl Glucoside (and) Cetearyl Alcohol	5.0
	Shea Butter ⁽⁴⁾	Butyrospermum Parkii (Shea) Butter	3.0
	Joboba Oil ⁽⁴⁾	Simmondsia Chinensis (Jojoba) Oil	3.0
	Hazelnut Oil ⁽⁴⁾	Corylus Avellana (Hazel) Seed Oil	3.0
C	Bioxan T70 ⁽⁵⁾	Tocopherol	0.1
D	aq. Citric Acid / NaOH	Citric Acid / Sodium Hydroxide / Aqua	pH 4.5 • 8.0
E	EasySafe P8 / GC 8 / OC 8 ⁽¹⁾	Caprylyl Glycol + X...	0.5 • 1.5 %

Phase	Raw material	INCI name	%
A	Demineralized Water	Aqua	ad 100
	Xanthan Gum N ⁽²⁾	Xanthan Gum	0.6
	Plantacare 818 UP ⁽³⁾	Coco Glucoside	15.0
	Plantapon ACG HC ⁽³⁾	Sodium Cocoamphoacetate	5.0
B	TEGO Betain F 50 ⁽⁶⁾	Cocamidopropyl Betain	5.0
B	aq. Citric Acid / NaOH	Citric Acid / Sodium Hydroxide / Aqua	pH 4.5 • 8.0
C	EasySafe P8 / GC 8 / OC 8 ⁽¹⁾	Caprylyl Glycol + X...	0.5 • 2.0 %

Raw material suppliers:

⁽¹⁾ Minasolve ⁽²⁾ Jungbunzlauer ⁽³⁾ BASF ⁽⁴⁾ Casear & Loretz ⁽⁵⁾ BTSa ⁽⁶⁾ Evonik

	pH	EasySafe P8			EasySafe GC 8			EasySafe OC 8			Octiol		
		0.5%	0.75%	1%	0.75%	1%	1.5%	0.5%	0.75%	1%	0.75%		
O/W emulsion	4.5	A	A	●	B	A	●	A	A	●	●		
	5.5	A	A	A	B	A	A	A	A	A	A		
	7.0	●	B	A	B	B	A	●	B	A	A		
	8.0	●	A	A	●	●	●	●	A	A	●		
Sulfate-free shampoo (very hard to preserve)	pH	1,0%	1,5%	2,0%	1,0%	1,5%	2,0%	0,75%	1,0%	1,5%	1,0%		
	4.5	A	●	●	B	A	●	B	A	●	●		
	5.5	●	B	A	B	B	A	B	B	A	B		
	8.0	●	B	A	●	●	●	●	B	A	●		
	pH	EasySafe GC 8 + EasySafe P8						EasySafe GC 8 + EasySafe OC 8					
		0,5% + 0,5%		0,75% + 0,75%		1% + 1%		0,5% + 0,5%		0,75% + 0,75%		1% + 1%	
		4.5	A	●	●	●	●	A	●	●	●	●	
5.5	●	A	●	●	●	●	A	●	●	●			

A B Challenge test result, fulfils criteria A/B of ISO 11930 ● Likely to fulfill criteria A of ISO 11930 ● Not suitable for this application

Standalone antimicrobial solutions

- ▶ The three EasySafe solutions are effective as standalone protection agents for various types of personal care products.

- ▶ EasySafe P8 and EasySafe OC 8 can also act synergistically in combination with EasySafe GC 8