



MINASOLVE® is an affiliate of MINAFIN® Group

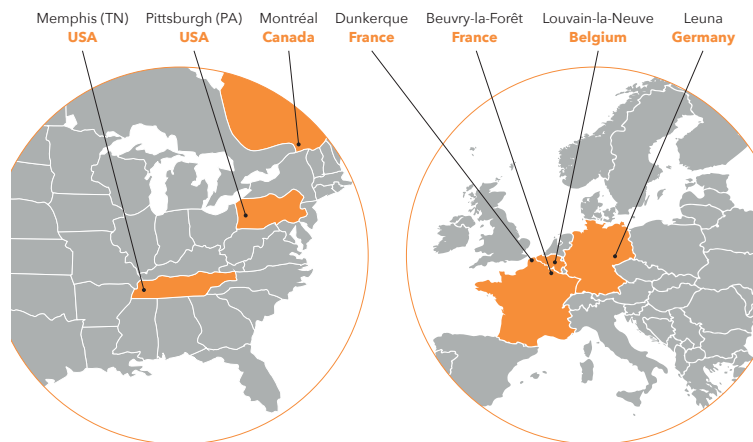
Created in 2004, The Minafin® Group is an expert in Health Chemistry, Green Chemistry and Challenging Chemistry. Activities include industrial subcontracting, development of chemical syntheses and industrial scale-up of custom-made processes as well as proprietary products with high added value for the pharmaceutical, cosmetics, agriculture and high-tech industries. Strong synergies exist between all business units: MINASOLVE, MINAKEM, PENNAKEM, PRESSURE CHEMICAL and MINASCENT.

Serving market leaders as well as emerging players we support our customers' efforts to improve the quality of life in the global community by:

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

Specifications and Characteristics

	E-Sensofeel MFC 5	E-Sensofeel MFC 8
INCI	Water, Pentylene Glycol, Cellulose, Xanthan Gum	Water, Glycerin, Cellulose, Caprylyl Glycol, Xanthan Gum
CAS REG. N°	7732-18-5, 5343-92-0, 9004-34-6, 11138-66-2	7732-18-5, 56-81-5, 9004-34-6, 1117-86-8, 11138-66-2
APPEARANCE	Opaque gel	Opaque gel
RECOMMENDED pH OF USE	4.0 ▶ 12.0	4.0 ▶ 12.0
RECOMMENDED USE LEVEL	3.0 ▶ 20.0%	3.0 ▶ 20.0%
NATURAL ORIGIN INDEX	1 (ISO 16128)	1 (ISO 16128)
COSMOS APPROVED	✓	✓
PALM-OIL FREE	✓	X (RSPO, mass balance)
LISTED PRESERVATIVE-FREE	✓	✓



300
M€ SALES

1050
EMPLOYEES

150
SCIENTISTS

7
PRODUCTION SITES

MINAFIN
GROUP

2024.02. V2.1

The given information is accurate to the best of our knowledge. Buyers are advised to make their own studies on the usefulness of any product for a particular application or purpose. Recommended usage information is only provided as indication, and should not be considered as recommendations to use the products in violation of any patents, intellectual property rights, laws, or regulations relating, but not limited to, manufacture, composition, product design or end usage.

TOILETRIES

E-SENSOFEEL MFC 5&8 IN TOILETRIES APPLICATION

CREATING ATTRACTIVE COSMETICS
IN A NATURAL WAY

RICHER FOAM, SOFTER HAIR & ANTI-DRIP EFFECT

✓ LOOK

✓ TOUCH

✓ FEEL



COSMOS
APPROVED



NATRUE
APPROVED



MINASOLVE
BIO-INGREDIENTS FOR YOUR APPLICATIONS

green
solving
attitude.

WWW.MINASOLVE.COM

Sensofeel MFC range, from Minasolve

100% BIOBASED, CREATING ATTRACTIVE NATURAL COSMETICS WITH EXCELLENT LOOK, TOUCH AND FEEL.

Minasolve, in partnership with the Swiss cellulose specialist Weidmann, introduces the new **Sensofeel** product line based on Microfibrillated Cellulose (MFC, Figure 1).

E-Sensofeel MFC 5 & 8 are hydrogels stabilised with **sustainable** and **biobased additives**. Both versions have long shelf-life and are **easy to incorporate** into cosmetic formulations.

The ingredients form a three-dimensional network of micrometer-sized natural cellulose fibers. These fibers are mechanically entangled (microfibrillated cellulose) which provides strength and structure to the formulation. The cavities within the 3D fiber network are similar in size to foam bubbles, oil droplets or pigment particles. This is why **Sensofeel MFC** is a **powerful foam booster** and **provides a rich and pleasant texture to surfactant products**.

At the same time, when applied to the skin, the fibers immediately become flexible and form a gentle film. **Sensofeel MFC** range therefore **naturally improves the sensory properties** of many formulations.

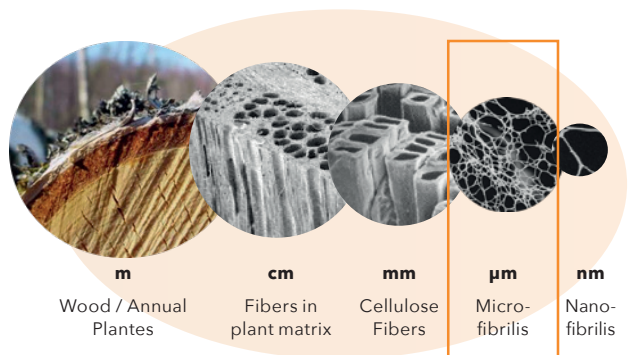


Figure 1

E-Sensofeel MFC 5 and **E-Sensofeel MFC 8** are COSMOS approved and manufactured entirely in Europe. The pulp used as raw material for **E-Sensofeel MFC** comes from locally-sourced, sustainably-managed forests in Europe. It is environmentally friendly, readily biodegradable, and produced via a purely mechanical process without the use of chemicals or enzymes.



Toiletries

"Toiletries are all about foaming"



Hair care

E-Sensofeel MFC 8 in shower gel

E-Sensofeel MFC 8 was added to a shower gel formulation (Table 1) to test its influence on viscosity. As expected, the 3D cellulose fiber network of **Sensofeel MFC** strengthens the internal structure of the formulation: the test performed with **E-Sensofeel MFC 8** showed a **significantly improved drip resistance** compared to the placebo (Figure 2). The shower gel with **E-Sensofeel MFC 8** is **more compact** and **thixotropic**.

In addition, **E-Sensofeel MFC 8** produced a **denser, creamier** and **more voluminous foam**.

Shower gel (Table 1)

Phase	Raw Materials	Raw Materials	%	
			Placebo	E-Sensofeel MFC 8
A	Water	Aqua	40.75	29.65
	Hydra-Leen 8 Camomile BIO ⁽¹⁾	Anthemis Nobilis Flower Water, Caprylyl Glycol, Glycerin, Water	30.00	30.00
	E-Sensofeel MFC 8 ⁽¹⁾	Water, Glycerin, Cellulose, Caprylyl Glycol, Xanthan Gum	-	11.10
	Viscogum FH ⁽²⁾	Cyamopsis Tetragonoloba Gum	0.25	0.25
	SAFIC' Care T GXG ⁽³⁾	Cyamopsis Tetragonoloba Gum (and) Xanthan Gum	1.00	1.00
B	Plantacare 818 UP ⁽⁴⁾	Coco-Glucoside	15.00	15.00
	Plantapon ACG HC ⁽⁴⁾	Sodium Cocoyl Glutamate	5.00	5.00
	Tego Betain F 50 ⁽⁵⁾	Cocamidopropyl Betaine	5.00	5.00
C	E-Leen Green C ⁽¹⁾	Pentylene Glycol, Glyceryl Caprylate/Caprates	3.00	3.00
D	50% aq. Citric Acid	50% aq. Citric Acid	Qs	Qs

Raw material suppliers: ⁽¹⁾ Minasolve ⁽²⁾ Cargill ⁽³⁾ Safic Alcan ⁽⁴⁾ BASF ⁽⁵⁾ Evonik

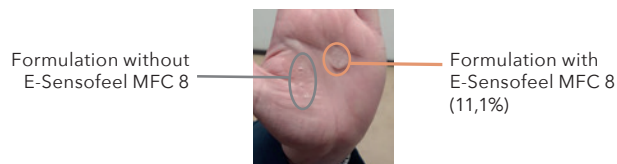


Figure 2

Applications

E-Sensofeel MFC 5 and **8** are **stable** under a wide range of storage conditions.

Incorporation into toiletries can be done with **standard agitators**. A combination of **E-Sensofeel MFC** with natural **thickeners** is recommended to avoid syneresis (= formation of a water layer on the surface). The thickeners should preferably be added after the dispersion of **E-Sensofeel MFC**.

E-Sensofeel MFC 8 in leave-on hair conditioner

Compared to the standard formulation (Table 2), the addition of 11,1% **E-Sensofeel MFC 8** resulted in **higher consumer satisfaction**. In addition to acting as a **natural opacifier**, hair was perceived to be **softer** and **volume increased** after one week of use (Figure 3).

Leave-on conditioner (Table 2)

Phase	Raw Materials	INCI	%	
			Placebo	E-Sensofeel MFC 8
A	Water	Aqua	47,35	41,80
	Hydra-Leen 5 Rose ⁽¹⁾	Rosa Damascena Flower Water, Pentylene Glycol	47,35	41,80
	Glycerin	Glycerin	3.00	3.00
	Safic Care T GXG ⁽²⁾	Cyamopsis Tetragonoloba Gum, Xanthan Gum	0.30	0.30
B	E-Sensofeel MFC 8 ⁽¹⁾	Water, Glycerin, Cellulose, Caprylyl Glycol, Xanthan Gum	-	11.10
C	E-Leen Green B ⁽¹⁾	Pentylene Glycol, Water, Sodium Benzoate, Benzoic Acid	2.00	2.00
D	Citric Acid / Sodium Hydroxide	Citric Acid / Sodium Hydroxide	Qs	Qs

Raw material suppliers: ⁽¹⁾ Minasolve ⁽²⁾ Safic Alcan

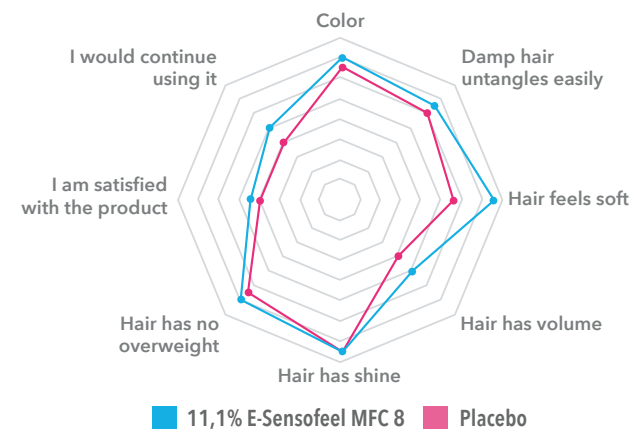


Figure 3

E-Sensofeel MFC 8 enhances **LOOK, TOUCH** and **FEEL** and turns an ordinary formulation into an **exciting** one.