

AMPHISOL® K

K-ELEMENT

Ultimate stability for
multi formulations



April 2025

dsm-firmenich 

AMPHISOL® K

Ultimate stability for multi formulations.

- A high performing Potassium Cetyl Phosphate (PCP) emulsifier for **the most challenging formulations with higher proven performance vs main benchmarks.**
- A **unique solution for the creation of innovative textures and applications** which place you and your company in a **leading position** in an increasingly competitive market.
- This is possible through **the unique microdomains technology** capable of stabilizing **the most versatile combination of ingredients with high amounts of pigments, electrolytes, ethanol and oil from sunscreens to skin care and make-up.**
- AMPHISOL® K can also be used as a **co-emulsifier** to **rescue and beautify your formulations**, making processing easier.
- AMPHISOL® K brings **additional benefits to your products such as improved moisturization, SPF boosting and remarkable sensory signature.**

K-ELEMENT

Stabilized formula
by AMPHISOL® K



An extensive, uniform and unique formation of self-organizing molecules that guarantee maximum stability.



AMPHISOL® K is 3x MORE likely to be recommended by formulators than its main competitors*

Voice of customers (114 responses)

Low dosage and yet very effective, no residue on the skin

It gives emulsion stability in hopeless cases

High flexibility to formulate various products

Low use level fixes unstable formulations

Easy to work, low concentration and good stability, and helps the viscosity too

It's the best choice to use as a second emulsifier especially in sun care formulations

* Source: Internal survey with current AMPHISOL® K users and formers – Total of 114 responses – Net Promoter Score comparison – NPS main competitors = 5

AMPHISOL® K ID card

A unique composition

INCI:	Potassium Cetyl Phosphate
Type:	Anionic O/W emulsifier
Appearance:	White to beige powder
Cetyl alcohol:	Max 2%
Potassium:	7.0 – 12.0%
Theoretical HLB value:	9.6
Unique performance driver:	Typical phosphate content up to almost 100 times lower than competition

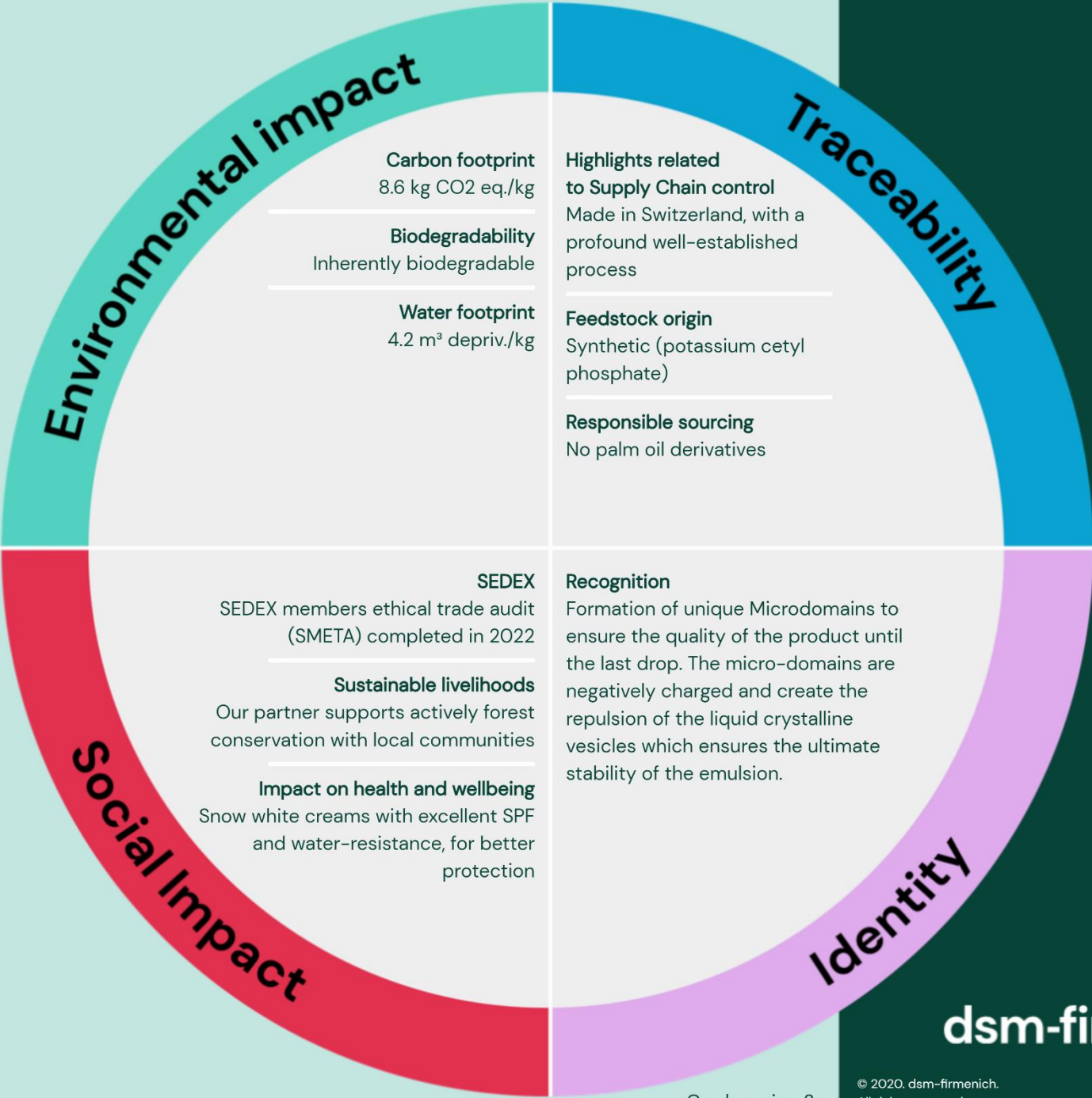


AMPHISOL® K

INCI name: POTASSIUM CETYL PHOSPHATE
Product codes: 0452130

GOLD STANDARD EMULSIFIER
for challenging high oil load
formulations (e.g. high SPF)

The carbon and water footprint calculations are based on internally conducted LCA according to ISO 14040/44 guidelines, dsm-firmenich LCA policy and validated by an internal reviewer. The biodegradability is based on relevant OECD tests.



Aligned with and contributing to the

**SUSTAINABLE
DEVELOPMENT
GOALS**



dsm-firmenich

AMPHISOL® K

Ultimate stability for multi formulations

Multi textures and product types



Pump sprays



Dispensers



Bottles



Tubes



Jars

Multi applications



Skin



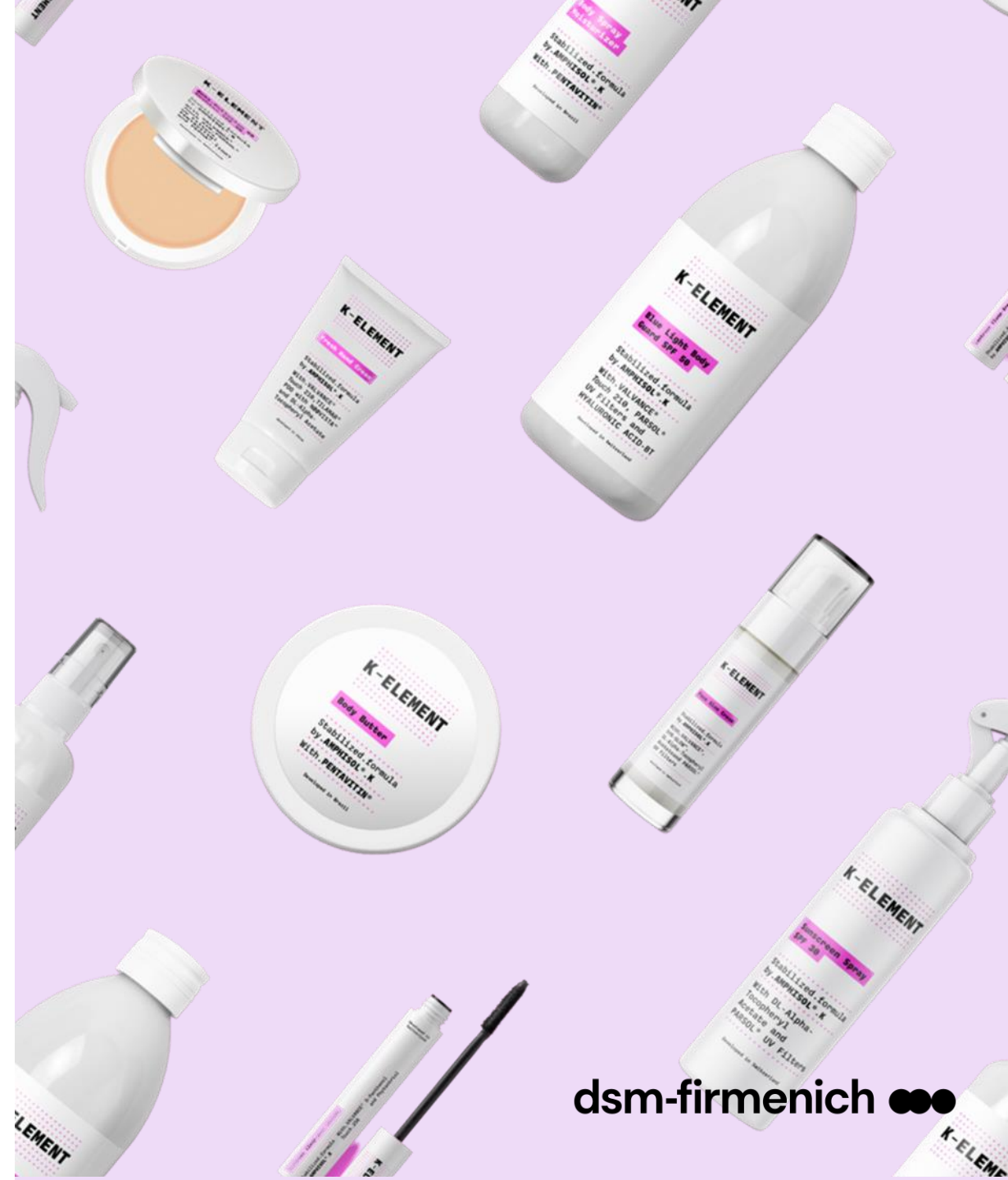
Sun



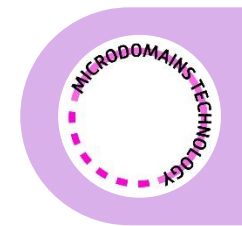
Make-up

Thanks to the unique microdomains technology capable of stabilizing the most challenging combination of ingredients

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AMPHISOL® K overcomes each formulation challenge



Performance proof against:

- Emulsifier competitors
- PCP competitors



High oil
content



High salt,
electrolyte
content



High pigment
content



High ethanol
content



Spray



Rescue your formulation with just 0.5% AMPHISOL® K



Consumers' expectation for multiple textures and multifunctional products brings a series of technical challenges, especially when it comes to stabilization.



Secure your brand image

Ensure even your most challenging formulations remain stable and maintain your consumers' trust.

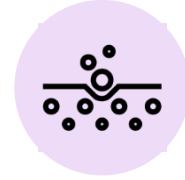


Save your time & costs and secure every last drop of your unstable emulsion by adding 0.5% AMPHISOL® K to your emulsifying system.

How AMPHISOL® K works:



It reduces the emulsion droplets and optimize the particle size distribution.



Its microdomains technology will lock the stability of the formulation.



Being used as a co-emulsifier makes processing easier (lower temperature of introduction 60–85°C).



The formulation is creamier and shinier.

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