



Minasolve® is a brand of Minafin® Group

The Minafin® Group, whose affiliates develop and manufacture active pharmaceutical ingredients, organic intermediates and specialty fine chemicals for the life science industries and technical applications is organized around **5 brands**, each dedicated to specific end-users or chemical technologies :

- ▶ Minakem®
- ▶ Minasolve®
- ▶ Pennakem®
- ▶ Pressure Chemical®
- ▶ Minascen®

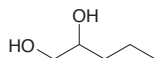
Serving market leaders as well as emerging players, we support our customers' efforts to improve the quality of life in the global community by:

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

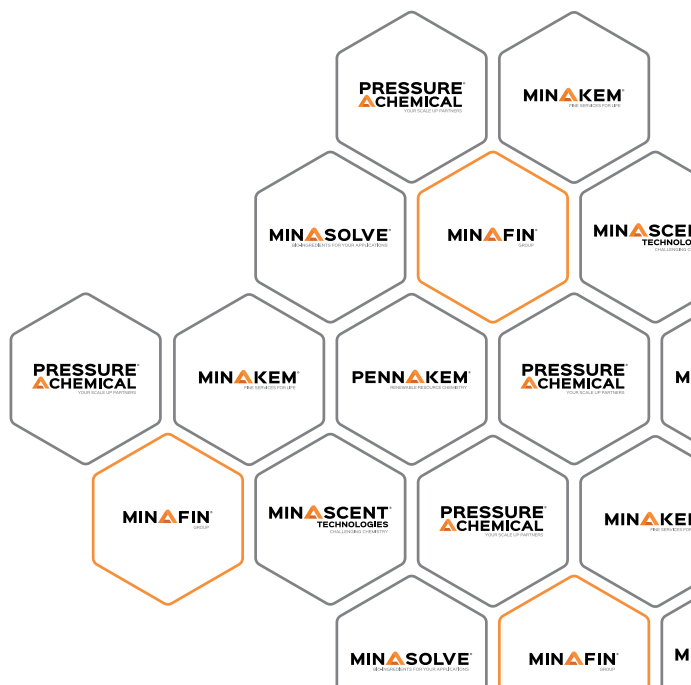
Specifications and Characteristics

INCI	Pentylene Glycol
CAS REG. N°	5343-92-0
APPEARANCE	Colourless liquid
ODOUR	Odourless
PURITY	Min. 99.0 %
SOLUBILITY	Hydrophilic, readily soluble in water and alcohol
RECOMMENDED PH OF USE	3.0 ▶ 10.0
RECOMMENDED USE LEVEL	0.5 ▶ 5.0%
REGULATORY STATUS	Globally approved
ORIGIN	100% nature-derived Made from non-food parts of corn (cobs) and sugar cane (bagasse)

CHEMICAL STRUCTURE



COSMOS APPROVED



A leen®5

FROM BIOMASS TO COSMETIC

Biosourced odourless Pentylene Glycol

- ✓ Anti-microbial
- ✓ Emollient
- ✓ Moisturizer
- ✓ Solubilizer
- ✓ Extraction solvent



COSMOS APPROVED



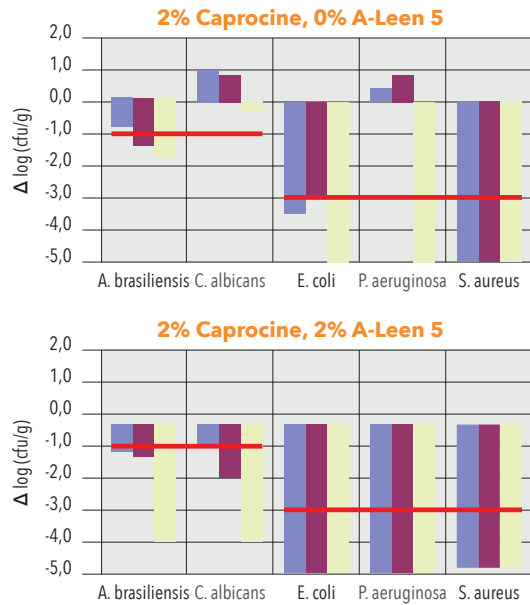
MINASOLVE®
BIO-INGREDIENTS FOR YOUR APPLICATIONS

green solving attitude.

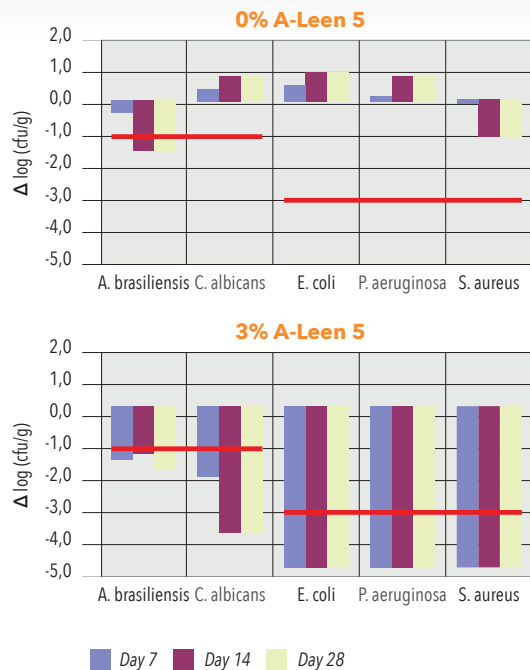
WWW.MINASOLVE.COM

Challenge tests according to ISO 11930

O/W-emulsion, pH 5.5
A-Leen 5 is a preservative booster



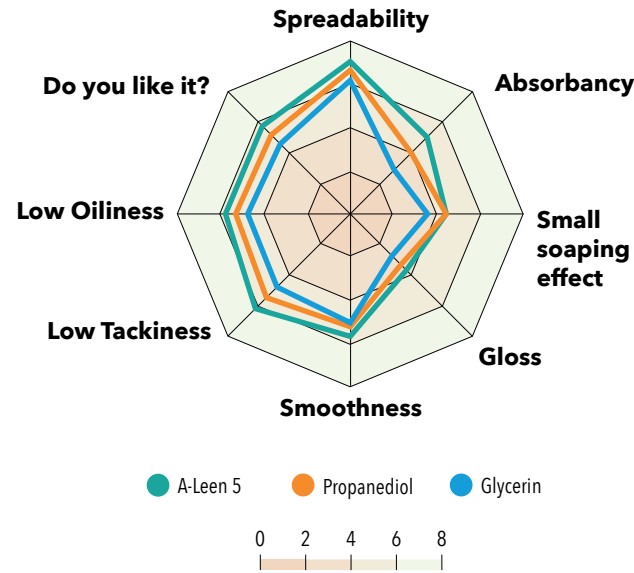
Wellbeing body cream, pH 5.3
A-Leen 5 can be used as a standalone preservative



— ISO 11930 requirements for log (cfu/g) reduction after 28 days (criteria A)

Sensory profile

3% in an O/W-emulsion, by 23 volunteers

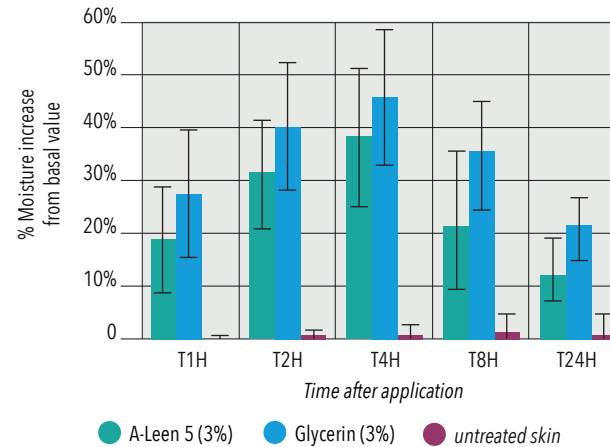


Applications

- ▶ **A-Leen 5** is an easy to handle liquid. It can be added directly to the water phase, but can also be mixed with vegetal oils. For optimum efficacy of preservation, it should be added to emulsions at the post-emulsification stage.
- ▶ **A-Leen 5** is an effective skin humectant with emollient properties, making it a versatile skin-conditioning agent in cosmetic products.
- ▶ **A-Leen 5** can act as a solubilizer and as a solvent for extraction; it also helps to hydrate gelling agents such as Xanthan Gum.

Skin Moisturizer

A-Leen 5 has a long-lasting moisturizing effect similar to glycerin. Clinical study over 24 hours - 12 volunteers



The given information is accurate to the best of our knowledge. Customers are advised to perform their own studies on the usefulness of any ingredient for a particular application. Any recommended usage information is only provided as indication, and should not be considered as recommendation to violate of any laws, patents, or official regulations dealing with manufacture, composition, local procedures, product design, or end usage.