

NovaSOL® Q

Crystal clear & highly bioavailable CoQ10 solutions



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NovaSOL® Q fully utilizes the benefits of AQUANOVA's advanced solubilisation technology, creating a biomimetic formula with a nature like micelle structure. For the first time, coenzyme Q10 is available as a crystal clear liquid with unparalleled product features. Unlike other formulations, NovaSOL® Q offers 100% water and 100% fat solubility at the same time. Our nature like carriers ("product micelle") for coenzyme Q10 make it possible for NovaSOL® Q to generate crystal clear solutions, which prove to have a significantly higher bioavailability than other formulations on the market today. Thus NovaSOL® Q goes far beyond the scope of standard powders or other standard formulations with lipophilic coenzyme Q10. NovaSOL® Q can be used in a broad variety of applications and products such as beverages or dietary supplements, especially soft gel capsules. Furthermore the formulation is proven to be absolutely stable, industry safe and ready to use for production. Thus AQUANOVA opens up a new space for your creation of innovative products in the food, health, cosmetics and pharmaceutical sectors.



Applications

NovaSOL Q is available for a variety of applications

- Dietary supplements
- Functional foods
- Innovative beverages
- Crystal clear fitness & energy drinks
- Cosmetic creams
- Pharmaceutical products

Coenzyme Q10 (ubiquinone)

- an ubiquitous nutrient
- Natural, lipophilic compound
- Located in the cell mitochondria
- Essential cofactor in the generation of energy (ATP)
- Strong physiological antioxidant
- Physiological synthesis starts to slow down beyond the age of 20 and drops dramatically beyond the age of 40
- Supposed benefits for heart health and immune system
- Supposed "anti aging" effect for the skin

Scientific basis

NovaSOL® Q has proven to be a superior dietary supplement.

- Controlled blinded and randomized study
- Up to 4 times faster and higher resorption
- Challenging comparison to leading market products and straight Q10
- Strictly conducted along state of the art standards
- Basis: 60 participants

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NovaSOL® Q stands for novel water- & fat soluble and highly bioavailable CoQ10 grades manufactured through AQUANOVA's advanced solubilisation technology.

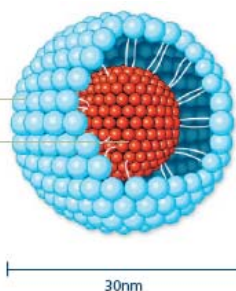
NovaSOL® Q 5% capsule grade: The dietary supplement grade. Especially designed for soft gel capsules but also well suited for hard gels. Its superior bioavailability has been proven in comparative human studies. The higher efficacy allows to take less CoQ10 for the same physiological effect. The high bioavailability is due to the water solubility, which, in turn, is achieved by the micelles, which function as a carrier for CoQ10. These micelles have a diameter of less than 30 nanometers and don't need any further biological micellization to pass the wall of the small intestine. NovaSOL Q 5% can be encapsulated without any auxiliary or further processing step and has a very high stability. For our customer's convenience, beside the NovaSOL® Q 5% bulk solution, AQUANOVA offers the final dosage form, i.e. soft or hard gels as well. It is also recommended for the use in cosmetic creams.

NovaSOL® Q 22% and 3% grade: The basic (22%) and the beverage (3%) grade belong together. The 3% grade is made by diluting the basic grade with water prior to application. The micelles are smaller than the wavelength of light, and, hence, yield crystal clear solutions. This means, for the first time CoQ10 can be added to crystal clear beverages, which opens up the whole segment of the highly attractive sports, energy and fitness-drinks. This could be shown in a human study.

NovaSOL® Q nano sized micelle

Shell

Coenzyme® Q10



AQUANOVA's solubilisation technology offers the dietary supplement, functional foods and drinks, as well as the cosmetics industries, great opportunities to supply new value added CoQ10 products with properties hitherto not possible.

Presentation / grades

- Yellow-orange liquid (solubilisate)
- Three bulk solubilisates grades
 - o 3% beverage grade (Germany only)
 - o 5% capsule grade
 - o 22% basic grade
- Bulk soft gels with highly bioavailable 5% Q10 softgels e.g. with 15 or 30 mg
- Full Service private label soft gels

Proven benefits

Unique features of our high tech formulas are:

- Superior bioavailability
- Liquid and crystal clear
- Readily water soluble
- Readily fat soluble
- State of the art nanotech/nano sized product micelles
- GRAS status ("generally recognized as safe")
- Kosher
- Halal upon request
- Animal free, GMO free



Documentation & Samples

On request we will supply you with:

- Product data sheet
- Certificate of analysis
- Material safety data sheet (MSDS)
- Summary bioavailability study
- Product samples

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**AQUA
NOVA®**

AQUANOVA is a supplier of innovative and versatile formulations of food and cosmetic ingredients, nutrients and pharmaceutical actives with superior properties providing new application opportunities. AQUANOVA in close cooperation with renowned scientists develops and manufactures (under ISO / GMP) liquid formulas (solubilisates with product brand "NovaSOL®") utilizing its proprietary technology. The solubilisates have a micelle structure, which is thermally, mechanically and pH stable, even in gastric acid. Owing to the special properties of this micelle structure, the solubilisates support the development of novel innovative and pioneering dietary supplements, functional foods and beverages, cosmetic products and pharmaceuticals. The company's headquarter is located in Darmstadt (near Frankfurt), Germany.

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