

NovaSOL®

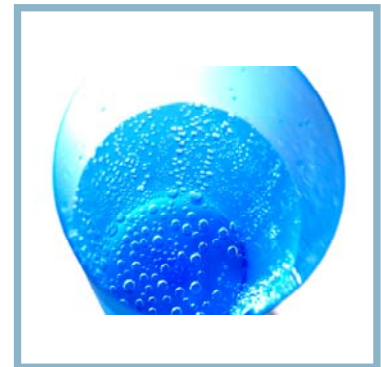
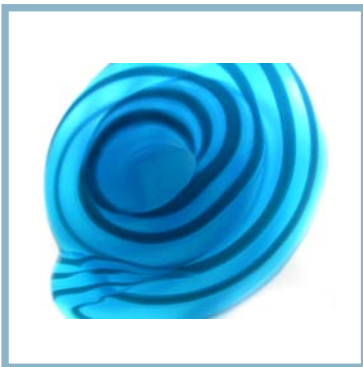
Crystal Clear Solutions - Overview



2006

FROST & SULLIVAN

Excellence in Technology Award



NovaSOL®

Crystal Clear Solutions - Overview

AQUANOVA is a leading supplier of innovative liquid solutions ("solubilisates") for a broad spectrum of well known raw materials and active substances (e.g. vitamins, fatty acids or phytoextracts). Completely in accordance with the era of nanotechnology and nature's architecture, AQUANOVA develops, produces and together with partners markets these solubilisates (product brand "NovaSOL®") utilizing its proprietary and patent protected technology. For the first time a variety of fat soluble substances are now available as crystal clear liquids with unparalleled product features.

The nano sized carriers ("product micelles") within the solubilisates have a diameter below 30 nanometers (a millionth of a millimeter) and therefore are even smaller than the wavelength of light. This makes it possible for NovaSOL® solubilisates to create crystal clear solutions, which prove to have a significantly higher bioavailability than other formulations on the market today.

NovaSOL® solubilisates are both water and fat soluble ("ambiphilic") and go far beyond the scope of standard powders or other standard formulations. They can be used in a broad variety of applications and products such as beverages or dietary supplements, especially soft gel capsules. Furthermore the solubilisates are proven to be very stable 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.



NovaSOL® Solubilisates

Liquid, at the same time water and fat soluble raw materials & ingredients with nano structure:

- Vitamins
- Omega-3 fatty acid
- Coenzyme Q10 (with GRAS status)
- Isoflavones, flavonoids, carotenoids
- Phyto extracts
- Essential oils
- Preserving agents
- Food coloring substances
- Other bioactive substances

Applications & Advantages

Key technology with outstanding physiological and technical characteristics:

- Broader applications for nutraceuticals
- Superior efficiency for antioxidants and preservatives
- Superior bioavailability of actives
- Chemically unmodified substances
- Crystal clear, liquid solutions
- Mechanically, thermally, pH stable
- Ready to use for production
- Processing without additives



Scientific evidence

The effect of NovaSOL® solubilisates rely on a broad range of randomized controlled blinded studies:

- e.g. for Coenzyme Q10
- e.g. for skin penetration
- e.g. for antioxidative capacity
- We provide you with research that applies to your solutions.

NovaSOL®

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NovaSOL® is already available in ready to use products, which represent a broad variety of substances. In addition AQUANOVA offers its solubilization expertise for an even wider range of raw materials and active substances. AQUANOVA's technology offers the dietary supplement, functional foods and drinks, as well as the cosmetics industries, great opportunities to supply new value added products with properties hitherto not possible.

Product	Description	Dietary Supplements	Functional Food	Food Additives	Cosmetics
NovaSOL® A	Vitamin A-Solubilisate	X	X		
NovaSOL® ADEK-Q10	Solubilisate of Vitamine A, D, E, K & Coenzyme Q ₁₀	X			X
NovaSOL® βC	β-Carotene-Solubilisate		X	X	
NovaSOL® C	Ascorbic Acid- Solubilisate			X	
NovaSOL® S	Ascorbic Acid - / DL-α- Tocopherol- Solubilisate (for processed meat/sausage)			X	
NovaSOL® COF	Ascorbic Acid / DL-α- Tocopherol-Solubilisate (for oils / fats)			X	
NovaSOL® CT	Ascorbic Acid- / Mixed-Tocopherol- Solubilisate (for essential oils, flavors, fragrances, cosmetics)			X	X
NovaSOL® Citric	Citric Acid-Solubilisate			X	
NovaSOL® DS/5	Sorbic Acid-Solubilisate (preservation of food, drinks & cosmetics)			X	X
NovaSOL® DC/12	Benzoic Acid-Solubilisate (preservation of cheese rind & sausage casings)			X	
NovaSOL® DS/12	Benzoic Acid-Solubilisate (preservation of food, drinks & cosmetics)			X	X
NovaSOL® DC/44	Sorbic acid / Benzoic acid-Solubilisate (preservation of cheese rind & sausage casings)			X	
NovaSOL® DS/44	Sorbic acid / Benzoic acid-Solubilisate (preservation of food, drinks and cosmetics)			X	X
NovaSOL® E	DL-α-Tocopherol-Vitamin E-Acetate-Solubilisate	X	X		X
NovaSOL® ISO (source: soy isoflavones)	Isoflavone-Solubilisate, Capsule Grade	X	X		X
	Isoflavone-Solubilisate, Beverage Grade		X		
NovaSOL® Lipoic	α-Lipoic acid-Solubilisate	X	X		X
NovaSOL® Lutein	Lutein-Solubilisate	X	X		
NovaSOL® Omega	Omega 3-fatty acid- / Ascorbic acid-Solubilisate	X	X		X
NovaSOL® Q	Coenzyme Q ₁₀ Basic-Solubilisate, – GRAS	X	X		X
	Coenzyme Q ₁₀ -Solubilisate, Soft Gel Grade,- GRAS	X	X		X
	Coenzyme Q ₁₀ -Solubilisate, Beverage Grade – GRAS	X	X		
NovaSOL® Rosemary	Rosemary Extract - Solubilisate			X	
NovaSOL® SUSTAIN	Unique Weight management solution (please contact us for details)	X	X		

Solutions

NovaSOL® adapts to your applications and needs and offers solutions for:

- Dietary supplements
- Nutrition & Functional Food
- Innovative Beverages
- Cosmetic products
- Pharmaceutical products
- Protection of raw materials

Presentation

NovaSOL® products are offered in a variety of forms such as:

- Pure liquid bulk solubilisate
- Capsules in bulk
- Packaged Capsules (Full Service)



Documentation & Samples

On request we will supply you with:

- Product data sheets
- Certificates of analysis
- Material safety data sheets (MSDS)
- Summary bioavailability studies
- Product samples

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