

# DavosLife E3 DVP 30-WD

for Functional Foods and Beverages



## DavosLife E3 DVP 30-WD is water-dispersible powder form of natural Tocotrienols designed for incorporation into functional foods and beverages.

## Overcoming the immiscibility of Tocotrienols in Aqueous Medium

DVP 30-WD is a Tocotrienols powder which fully disperses when added to aqueous medium. The product self-disperses uniformly with good stability.

## **Advanced Dispersion Technology**



#### **Superior Dispersibility**

DVP 30-WD will begin to self-disperse upon addition to aqueous medium. A specialised production facility and high shear mixer is not required for successful incorporation into the finished product. This reduces incorporation of air into the product, which in turn reduces foaming or other stability issues.

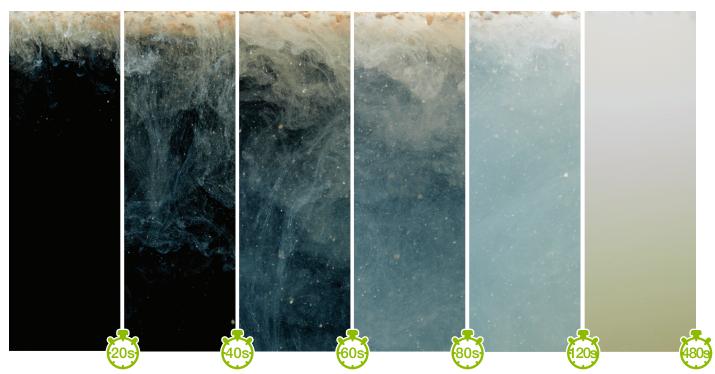


Figure 1: Timelapse photography over 8 minutes of DVP 30-WD in aqueous medium



#### Uniform dispersion

DVP 30-WD will form a uniform dispersion in aqueous medium upon mixing in the tanks. This avoids localised high concentrations of Tocotrienols powder which will then separate out of solution. Heating is also not required to achieve this fine dispersion so that fresh taste, fresh aroma and appearance of the product is preserved.



#### Stable dispersion

Once dispersed fully throughout the aqueous medium, DVP 30-WD remains stably dispersed for up to 48 hours. DVP 30-WD will remain stably dispersed in pre-blended compound mixtures throughout the production process.





Figure 2: Uniform suspension of DVP 30-WD in water

#### Standing after stirring



Figure 3: DVP 30-WD in suspension over 48 hours

## 4 Organoleptic Excellence

DVP 30-WD does not alter the taste profile of foods and beverages.

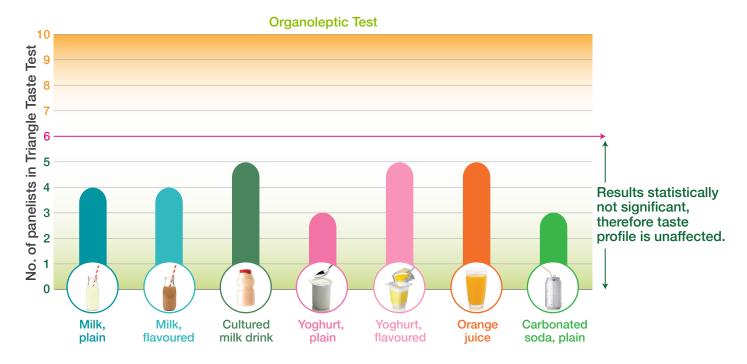


Figure 4: Triangle taste test results after the incorporation of DVP-30 WD into various beverages and yoghurt. The minimum significant number of correct judgements is above 6. DVP-30 WD is organoleptically acceptable.

## 5 Excellent Stability

Stability studies of DVP 30-WD at elevated storage (40°C) over 24 months (Figure 5) show that the total Tocotrienols content is very stable. This translates to stability during thermal processing, storage, and food preparation.

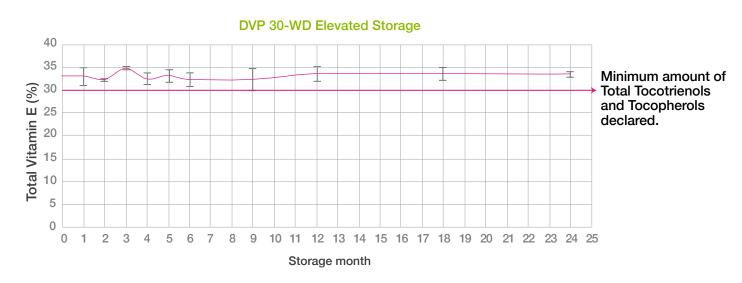


Figure 5: DVP 30-WD Accelerated Time Stability Data over 24 months at  $40^{\circ}$ C ±  $2^{\circ}$ C /  $75^{\circ}$ RH ±  $5^{\circ}$ RH.

## **Quality Assurance**

## Be assured by DAVOSLIFE E3

Davos Life Science is the only Tocotrienols manufacturer with a unique process and special technology that enables us to meet the major international regulatory standards on Persistent Organic Pollutants (POPs) and other contaminants in food and health supplements. The list includes, but is not exhaustive:

- EU 1259/2011, Dioxins / Furans & Dioxin-like Polychlorinated biphenyls (PCBs)
- EU 835/2011, Benzo(a)pyrene & Polycyclic aromatic hydrocarbons (PAHs)
- EP 7.0 Pesticides
- EU 629/2008, Heavy Metals
- · Food Chemical Codex, Heavy Metals

- United States USP 36 <561>, Pesticides
- Australia Therapeutic Goods Administration, Pesticides
- China Food Safety National Standard for Maximum levels of contaminants in foods GB 2762-2012, Benzo(a)pyrene
- Japan on Food Sanitation Law and Food Safety

## **Generally Recognised As Safe (GRAS)**

Tocotrienols are GRAS affirmed by the U.S. Food and Drug Administration as a permitted ingredient for functional foods and beverages.

#### **Accreditations**























Natural Source, Natural Ingredient.
Providing formulators & marketers with

ways to differentiate

their finished products



Contact us at info@DavosLife.com

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www.klkoleo.com/DavosLife to know more about us