

Antares Vitamin E TPGS NF
Product Data Sheet

Products	Antares Vitamin E TPGS NF
Product code	TG0101NF, TG0105NF, TG0115NF
Chemical name	d- α -tocopheryl polyethylene glycol 1000 succinate
Empirical formula	C ₃₃ O ₅ H ₅₄ (CH ₂ CH ₂ O) _n
Synonyms/Acronyms	Vitamin E TPGS or TPGS Tocophersolan (International Nomenclature of Cosmetic Ingredients – INCI and United States Adopted Names - USAN)
CAS Number	9002-96-4 (Chemical Abstracts Service registration number)

Antares Vitamin E TPGS NF is a water-soluble derivative of the natural form of d- α - tocopherol. In addition to serving as water-soluble source of vitamin E, TPGS has unique properties due to its dual combination of lipophilicity and hydrophilicity, similar to a surface-active agent.

Applications

Source of water-soluble vitamin E

Emulsifier and solubilizer

Enhancer of absorption and bioavailability

Product applications include dietary supplements, food and beverage, personal care and cosmetics, and animal nutrition products.

Typical Characteristics

Appearance	Waxy solid; white to light yellow
Solubility in water	Soluble (up to 20 weight %)
Melting point	38°C approximate (range 37-41°C)
Heat stability	Stable to melt/cool/remelt cycles; stability has been demonstrated up to 199 °C which significantly exceeds all normal, recommended processing temperatures
Specific gravity	1.06 at 45°C, approximate

Specifications

d- α -Tocopherol	25% minimum weight basis; range 25-30%)
Vitamin E	372 to 447 IU/gram
Solubility	Soluble in water at 20-wt %
Acid Value	1.5 (maximum)
Color, Gardner	Less than 10 (generally less than 5)

General Offices and Warehouse
232 Presidential Drive, Suite 5
Jonesborough, TN 37659
Tel 877.870.0159
Fax 630.458.0518

R&D Facility
222 LaDean Court, Suite F
Simpsonville, SC 29680
Tel 864.688.2347
Fax 630.458.0518

Accounting
PO Box 268
St. Charles, IL 60174
Tel 630.204.0211
Fax 630.458.0518

Antares Vitamin E TPGS NF

Product Data Sheet

Regulatory and safety information

The United States Pharmacopeia (USP) published a monograph for vitamin E TPGS in the USP/NF Supplement #9 dated November 15, 1998. The Food and Drug Administration (FDA) includes vitamin E TPGS in the list of inactive ingredients.

In Canada, vitamin E TPGS is approved as a form of vitamin E, in the European Community as an API (Active pharmaceutical Ingredient) and in Japan as a pharmaceutical excipient for oral drug formulations.

Antares Vitamin E TPGS NF meets the Current Good Manufacturing Practice (cGMP) requirements in manufacturing, packaging, labeling, or holding operations for food in the Food and Drug Administration Code of Federal Regulations Title 21 Part 110 (FDA 21 CFR Part 110) and dietary supplements in FDA 21 CFR Part 111. It also meets applicable regulations for microbial limits, heavy metals and residual solvents.

Packaging, storage and shelf life

Antares Vitamin E TPGS NF grade is available in 1 kg, 5 kg and 15 kg in tamper-evident plastic sealed containers. The containers are heat tolerant up to 70 °C.

It is recommended that the containers be stored at room temperature, opened when necessary with due care to avoid contamination.

Antares Vitamin E TPGS NF is labeled with a 4-year shelf -life from the date of manufacturing when stored in the original sealed unopened container.