Vitamin E polyethylene Glycol Succinate or Vitamin E TPGS is a surfactant which can be used as emulsifier, drug solubilizer, absorption enhancer, and as a vehicle for lipid-based drug delivery formulations.

**FORMULATION**
- Oral
- Parenteral
- Topical

**MAIN STRUCTURE**

D-\(\alpha\)-TOCOPHERYL POLYETHYLENE GLYCOL 1000 SUCCINATE

**PROPERTIES OF VITAMIN E TPGS**

- **Improving Drug Bioavailability**
  - Surfactant, enhance solubilization of poorly water soluble drug
  - Stabilization of amorphous drug
  - Enhances drug permeability by P-glycoprotein efflux inhibition.

- Emulsion vehicle
- Functional Ingredient in self-emulsifying formulations
- Thermal binder in melt granulation/extrusion processing
- Reducing drug sensitivity on skin or tissues
- Carrier for wound care and treatment
VITAMIN E TPGS

- Chemical Abstract Index name: Vitamin E Polyethylene Glycol Succinate
- CAS : 9002-96-4
- Empirical Formula: \( \text{C}_{33}\text{H}_{54}\text{O}_5 (\text{C}_2\text{H}_4\text{O})_n \)
- Molecular Weight: \( \sim 1513 \text{ Da} \)
- Physical form: solid wax with low melting point: 36 - 42 °C
- Color: White to light tan
- Vitamin E content (\( \alpha \)-tocopherol) 25 % minimum weight basis; standard range 25-30 %
- Retest date: 2 years

APPLICATION FIELD OF VITAMIN E TPGS

Due to its properties, Vitamin E TPGS is used for various applications:

- Pharmaceutical
- Nutraceutical
- Food & Beverage
- Cosmetic & Personal Care
- Animal Nutrition

MORE ABOUT VITAMIN E TPGS

Applications & Properties


On Safety:


