Super E 20
Contains Natural-Source Vitamin E (d-alpha-tocopheryl acetate)

Product Description
ADM’s Super E 20 is a Natural-Source Vitamin E (NSE) product and is a stable acetate-ester of d-alpha-tocopherol derived from vegetable oils combined with dl-alpha-tocopheryl acetate. ADM Super E 20 is produced by blending Natural-Source Vitamin E oil with dl-alpha-tocopheryl and a high-quality carrier to produce a free-flowing, mixable powder. Natural-Source Vitamin E is scientifically known as RRR-alpha-tocopherol.

Directions for Use
Super E 20 can replace any portion of synthetic vitamin E; however, the replacement rate should be calculated on the basis of biological activity (IU) rather than weight (milligrams) to maintain the same level of guaranteed vitamin E activity.

Considerable data indicates that naturally derived d-alpha-tocopherol may be retained in certain tissues or produce antioxidant responses in physiological systems that are significantly greater than the conversion factor specified by AAFCO.

As studies have found d-alpha-tocopherol responses are not consistent across species or physiological purposes, nutritionists are encouraged to review available data for the species or purpose for which they are formulating prior to considering potential higher biopotencies for Natural-Source Vitamin E.

Product Composition
Natural-Source Vitamin E is comprised of 100% RRR stereoisomer; whereas, synthetic vitamin E is comprised of only 12.5% RRR stereoisomer.

Analytical Considerations
Super E 20 provides:
- d-alpha-tocopheryl: 22.05 IU per gram (10,000 IU/lb)
- dl-alpha-tocopheryl: 22.05 IU per gram (10,000 IU/lb)

One milligram of d-alpha-tocopheryl acetate is defined by the Association of American Feed Control Officials (AAFCO) as having a biological equivalency (biopotency) that is 1.36 times greater than that of 1 milligram of dl-alpha-tocopheryl acetate (synthetic) vitamin E. Consequently, when feeds and supplements are submitted for analysis, the laboratory should be notified of the proportion of vitamin E activity (IU) in Super E 20 that is represented by d-alpha-tocopheryl acetate, so that the reported vitamin E activity levels will be accurate.

WHY ADM NATURAL-SOURCE VITAMIN E

- ADM is the world’s largest producer of NSE.
- Extracted from soy and other vegetable oils.
- NSE contains only d-alpha-tocopherol (RRR-alpha-tocopherol), the active form of vitamin E used in animal metabolism.
- Research over the last 10 years indicates NSE is several times more potent than synthetic vitamin E, which is a mixture of eight alpha-tocopherol isomers.
- Increased tissue tocopherol levels with NSE promote superior health benefits (improved immune function) compared with synthetic vitamin E.
- NSE provides differentiation within the marketplace.
- ADM Alliance Nutrition® — one source for virtually all your ingredient needs.
Storage & Handling
The acetate-ester is stable to air, heat, and moisture. Stability is the same as synthetic acetate-ester products. The product has minimal interactions with other ingredients commonly used in premixes, supplements, and complete feeds. Similar to other vitamin sources, the product should be protected from moisture, light, and temperature extremes.

Ingredients
roughage products, calcium carbonate, d-alpha-tocopheryl acetate, dl-alpha-tocopherl acetate

Physical Characteristics
Appearance: White to light cream color granular powder with bland odor and taste.

AAFCO Ingredient Definition
d-alpha-tocopheryl acetate, dl-alpha-tocopheryl acetate

Ordering Information
Product number: 79210014
Packaging: 50 lb bag
Customer service: 800-775-3295
or ANISpecialtyIngredients@adm.com

Additional NSE Product Option

Nova-E 405
Activity (d-alpha): 405 IU/g (183,708 IU/lb)
Product number: 642570AJ
Container size: 25 kg bag