

SAFETY DATA SHEET

REF: 91/155/EEC AND AMENDMENTS
WITH RESPECTIVE NATIONAL IMPLEMENTATIONS

VITAMIN E and MIXED TOCOPHEROLS

1.0 SUBSTANCE IDENTIFICATION

- 1.1 Commercial product name: Vitamin E or Mixed Tocopherols MTS
1.2 Chemical characterisation: d-alpha, -beta, -gamma, -delta-tocopherol, soya bean oil
1.3 CAS No: 59-02-9,119-13-1,148-03-8,7616-22-0,68956-68-3
1.4 **FOR USE IN FOOD**
1.5 Manufactured by: Archer Daniels Midland Company, 4666 Faries Parkway, Decatur, Illinois 62526, U.S.A.
1.6 Supplied in Europe by: ADM Natural Health & Nutrition, P.O. Box 2, 1540 AA Koog aan de Zaan, The Netherlands.
1.7 **NL Emergency Telephone Number: +31 75 64 64 646**
1.8 **U.K. Emergency Telephone Number: +44 151 420 9800**
1.9 **U.S. Emergency Telephone Number (24 hours): +1 217 424 5200**

2.0 COMPOSITION

- 2.1 d-alpha-, -beta, gamma, -delta-tocopherol with soya bean oil as diluent.
2.2 No hazardous impurities.

3.0 HAZARDS IDENTIFICATION

- 3.1 **Vitamin E and Mixed Tocopherols MTS are not classified as Dangerous Substances within the definitions of EU Directive 67/548 and Amendments, with respective National implementations**

4.0 FIRST AID MEASURES

- 4.1 After contact with eyes, flush immediately with plenty of water for at least 15 minutes.
4.2 No special precautions needed by those giving First Aid.

5.0 FIRE FIGHTING MEASURES

- 5.1 Dry chemical, water mist or foam extinguishers may be used.
5.2 No special fire hazards are known.

6.0 ACCIDENTAL RELEASE MEASURES

- 6.1 Absorb spill with vermiculite or other inert material, then recover dry product by vacuum or brush and shovel.
6.2 For larger spills, flush spill area with water spray. Prevent run-off from entering drains, sewers or streams.

VITAMIN E and Mixed Tocopherols MTS

7.0 HANDLING AND STORAGE

7.1 Store in a cool, dry place (recommended below 25°C and less than 60% relative humidity). Keep packs tightly closed and away from oxidising agents.

8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Respiratory protection: An approved respirator is recommended if airborne concentrations are not maintained at an acceptable level.
- 8.2 Hand protection: Not normally necessary but standard work gloves recommended.
- 8.3 Eye protection: Safety glasses recommended.
- 8.4 Other: No special precautions necessary.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Appearance: Clear amber liquid
- 9.2 Odour: Mild, characteristic
- 9.3 Boiling point: >200°C
- 9.4 Melting point: Not available
- 9.6 Specific gravity at 25°C: 0.94-0.96
- 9.7 Bulk density (packed): Not available
- 9.8 Vapour pressure: Not available
- 9.9 Solubility in water: Insoluble

10.0 STABILITY AND REACTIVITY

- 10.1 Chemical stability: Vitamin E and Mixed Tocopherols are stable if stored under cool, dry conditions.
- 10.2 Hazardous decomposition prods: Thermal decomposition may produce carbon monoxide and carbon dioxide.
- 10.3 Hazardous polymerisation: Will not occur.
- 10.4 Incompatible with: Strong oxidising agents.

11.0 TOXICOLOGICAL INFORMATION

- 11.1 Oral LD₅₀ (rat): >5000mg/kg
- 11.2 Dermal LD₅₀ (rat): >2000mg/kg (highest dose tested)

12.0 ECOLOGICAL INFORMATION

- 12.1 Vitamin E and Mixed Tocopherols are biodegradable in waste treatment facilities when well diluted.

VITAMIN E and Mixed Tocopherols MTS

13.0 DISPOSAL CONSIDERATIONS

13.1 Dispose in landfill as non-hazardous liquid waste.

14.0 TRANSPORT INFORMATION

14.1 No special requirements, and no restrictions on transportation by land, sea or air.

15.0 REGULATORY INFORMATION

15.1 All components of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances) or have been approved in the European Union by new substances notification.

15.2 In the USA, Vitamin E and Mixed Tocopherols MTS have GRAS (Generally Recognised As Safe for food use) status.

16.0 ADDITIONAL INFORMATION

16.1 See Product Data Sheet.