

d-alpha-Tocopheryl Acetate**0486574**

Version 3.0

Revision Date 10/14/2020

Date of last issue: 05/25/2016

SECTION 1. IDENTIFICATION

Product name : d-alpha-Tocopheryl Acetate

Substance name : (R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-trimethyltridecyl]-2H-1-benzopyran-6-yl acetate

Manufacturer or supplier's details

Company name of supplier : DSM Nutritional Products

Address : 45 Waterview Blvd
Parsippany NJ 07054-1298

Telephone : (908) 475-7373
Telefax : (908) 475-7406

Emergency telephone number : 1-800-424-9300 (24 HR CHEMTREC, CA & US); Outside CA & US +1-703-572-3887 (COLLECT CALLS ACCEPTED)

E-mail address of person responsible for the SDS : sds.nutritionalproducts@dsm.com

Recommended use of the chemical and restrictions on use

Recommended use : For the fortification of foods
Ingredient for capsules and/or tablets
Ingredient for personal care products

SECTION 2. HAZARDS IDENTIFICATION**GHS classification in accordance with 29 CFR 1910.1200**

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : (2R,4'R,8'R)- α -tocopheryl acetate
Vitamin E acetate

Molecular formula : C₃₁H₅₂O₃

Brief description of the product : Substance

Substance name : (R)-3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-trimethyltridecyl]-2H-1-benzopyran-6-yl acetate

CAS-No. : 58-95-7

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
alpha-tocopheryl acetate	58-95-7	>= 90 - <= 100

Actual concentration is withheld as a trade secret

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SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
- If swallowed : Rinse mouth with water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
- Most important symptoms and effects, both acute and delayed : No specific symptoms known.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Dry chemical
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during fire-fighting : None known.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
- Environmental precautions : Try to prevent the material from entering drains or water courses.
- Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

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SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Take necessary action to avoid static electricity discharge. Product will burn under fire conditions.
- Advice on safe handling : For personal protection see section 8.
- Conditions for safe storage : To maintain product quality, do not store in heat or direct sunlight.
Keep container tightly closed and dry.
- Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
alpha-tocopheryl acetate	58-95-7	TWA	5.9 mg/m ³	DSM Internal Limit

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Hand protection
Remarks : Glove material: for example nitrile rubber
- Eye protection : Safety glasses
- Skin and body protection : Lightweight protective clothing
- Hygiene measures : General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

- Appearance : viscous, oily liquid
- Colour : colourless - yellow
- Odour : odourless
- Odour Threshold : No information available.
- pH : No data available
- Crystallization range : ca. -7 - 28 °C
- Boiling point/boiling range : > 200 °C
- Flash point : 410 °F (210 °C) (closed cup)
- Evaporation rate : not determined
- Lower explosion limit : not determined
- Upper explosion limit : not determined
- Vapour pressure : < 0.001 hPa (20 °C)

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Relative vapour density	: not determined
Density	: 0.95 g/cm ³ (25 °C)
Water solubility	: < 0.27 mg/l practically insoluble
Solubility in other solvents	: Alcohol: soluble Acetone: easily soluble Chloroform: easily soluble Diethylether: easily soluble
Partition coefficient: n-octanol/water	: log Pow 12.26 (calculated (citation from literature))
Ignition temperature	: 577 °F (303 °C)
Thermal decomposition	: Decomposes on heating.
Viscosity, dynamic	: not determined
Viscosity, kinematic	: 701 mm ² /s (40 °C)
Explosive properties	: Not explosive
Oxidizing properties	: No data available

Other information

Molecular weight	: 472.74 g/mol
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SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No hazards to be specially mentioned.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: Possible incompatibility with materials listed under section 10.5.
Conditions to avoid	: Heat
Incompatible materials	: Bases Strong acids Oxidizing agents
Hazardous decomposition products	: No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50 (Mouse): 5,000 mg/kg : LD50 (Rat): > 4,000 mg/kg tested with the racemate
Acute dermal toxicity	: LD50 (Rat): > 3,000 mg/kg tested with the racemate
Skin irritation	: slight irritation (several species) tested with the racemate

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	: no phototoxic skin reaction (Guinea pig) tested with the racemate
Eye irritation	: No eye irritation (Rabbit) temporary redness tested with the racemate
Sensitisation	: Does not cause skin sensitisation. Test performed using a similar product.
Genotoxicity in vitro	: not mutagenic (Ames test)
Carcinogenicity	: (Rat) No indication for carcinogenicity known. tested with the racemate
IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive toxicity	: This information is not available.
STOT - single exposure (Acute exposure)	: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	: NOEL (Oral, minipig) : 2000 mg/kg bw/d Sub-chronic toxicity study (90-day) (OECD Test Guideline 409) : NOAEL (Oral, Rat) : 2000 mg/kg bw/d Sub-chronic toxicity study (90-day) (OECD Test Guideline 408)
Aspiration toxicity	: No aspiration toxicity classification

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Toxicity to fish	: Oncorhynchus mykiss (rainbow trout) LC50 (96 h) > 100 mg/l (nominal concentration) (OECD Test Guideline 203)
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- Toxicity to algae : Scenedesmus capricornutum (fresh water algae)
EC50 (72 h) > 100 mg/l
(nominal concentration)
(OECD Test Guideline 201)
- Toxicity to bacteria : activated sludge
IC0 (28 d) > 100 mg/l
(nominal concentration)
No inhibition was observed on microbial respiration.
(OECD Test Guideline 301F)
- Toxicity to fish (Chronic toxicity) : Oncorhynchus mykiss (rainbow trout)
NOEC (28 d) 100 mg/l
(nominal concentration)
tested with the racemate
(OECD Test Guideline 215)

Persistence and degradability

- Biodegradability : Not readily biodegradable.
54 % (28 d)
(OECD Test Guideline 301F)

Bioaccumulative potential

- Partition coefficient: n-octanol/water : log Pow 12.26 (calculated (citation from literature))

Mobility in soil

- Distribution among environmental compartments : No data available

Results of PBT and vPvB assessment

- Assessment : The substance does not fulfill the PBT criteria.
: The substance does not fulfill the vPvB criteria.

Other adverse effects

- Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
- Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

- Additional ecological information : There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : User must determine if any wastes generated exhibit hazardous characteristics as per 40 CFR Part 261 or other national / local legislation.

Offer surplus and non-recyclable solutions to a licensed dis-

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posal company.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
pyridine	110-86-1	1000	1000 (D038)
pyridine	110-86-1	100	100 (F005)
pyridine	110-86-1	1000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

alpha-tocopheryl acetate
pyridine

58-95-7
110-86-1

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

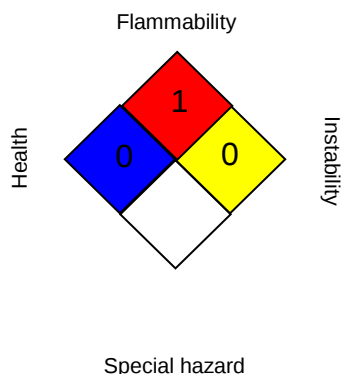
Washington Chemicals of High Concern

Product does not contain any listed chemicals

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION**Further information****NFPA 704:****HMIS® IV:**

HEALTH	/	0
FLAMMABILITY		1
PHYSICAL HAZARD		0

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

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AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

ACGIH = American Conference of Governmental Industrial Hygienists. CFR = Code of Federal Regulations. EPA = Environmental Protection Agency. NIOSH = National Institute of Occupational Safety and Health. OSHA = Occupational Safety and Health Administration. STEL = Short term exposure limit. TLV = Threshold Limit Value. TLV-C = Ceiling Limit Value. TWA = Time Weighted Average.

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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