

Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 03.03.2023 Version: 2.0

Product: Dry Vitamin E-Acetate 50% DC

(ID no. 30041051/SDS_GEN_00/EN)

Date of print 14.10.2025

1. Identification

Product identifier

Dry Vitamin E-Acetate 50% DC

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Vitamin

Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Operating Division Nutrition and Health

Telephone: +49 621 60-48434

E-mail address: EN-global-safety-data@basf.com

Emergency telephone number

International emergency number: Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

Label elements

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Globally Harmonized System (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

Other hazards

According to UN GHS criteria

The product is under certain conditions capable of dust explosion.

3. Composition/Information on Ingredients

Substances

Not applicable

Mixtures

Chemical nature

Preparation based on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

in a matrix of: Gelatins, Starch

<u>Hazardous ingredients (GHS)</u> According to UN GHS criteria

No particular hazards known.

4. First-Aid Measures

Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

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Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

water spray, carbon dioxide, dry powder, foam

Unsuitable extinguishing media for safety reasons:

water jet

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

carbon oxides, harmful vapours

The substances/groups of substances mentioned can be released in case of fire. Evolution of fumes/fog. Dust explosion hazard.

Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Cool endangered containers with water-spray.

6. Accidental Release Measures

Dust can form an explosive mixture with air.

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures, see section 8. Avoid dust formation.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Dispose of absorbed material in accordance with regulations. Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Avoid dust formation. Provide exhaust ventilation if dust is formed. Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

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The product is capable of dust explosion. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Use explosion-proof apparatus and fittings.

Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

57-50-1: Sucrose

1344-00-9: Silicic acid, aluminum sodium salt

9005-25-8: Starch 9000-70-8: Gelatins

Exposure controls

Personal protective equipment

Respiratory protection:

Breathing protection if dusts are formed. Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1or FFP1)

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

chemical protection overall (f.e. according to EN 13982) if dust is formed.

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Form: powder
Colour: almost white
Odour: odourless

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Odour threshold:

not applicable, odour not perceivable

pH value:

not applicable, substance/mixture is

non-soluble (in water)

melting range:

The substance / product decomposes therefore not

determined.

Boiling point:

not applicable

Flash point:

not applicable, the product is a solid

Evaporation rate:

not applicable

Flammability: not highly flammable

(Directive 92/69/EEC, A.10)

Lower explosion limit:

For solids not relevant for classification and labelling.

Upper explosion limit:

For solids not relevant for classification and labelling.

Vapour pressure:

not applicable

Density:

No information is available for the absolute density. Instead the bulk density was determined as a more

relevant value.

Relative vapour density (air):

not applicable, The product is a non-

volatile solid.

Solubility in water: dispersible

(approx. 35 - 40 °C)

Partitioning coefficient n-octanol/water (log Kow):

not applicable for mixtures

Thermal decomposition: >= 145 °C (DSC (DIN 51007))

self-accelerating reaction

Viscosity, dynamic:

not applicable, the product is a solid

Viscosity, kinematic:

Explosion hazard:

not applicable, the product is a solid

Product is not explosive, however a

dust explosion could result from an

air / dust mixture.

Fire promoting properties: Based on its structural properties

the product is not classified as

oxidizing.

Other information

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Burning rate: The material doesn't meet the criteria

specified in paragraph 33.2.4.4 of UN

manual of tests and criteria.

An ignition of the test substance does not lead to a progagation by burning

with flame or smouldering.

spontaneous heating.

Self heating ability: It is not a substance capable of

(UN Test N.4 (self heating

(Directive 92/69/EEC, A.10)

substances))

SADT: > 75 °C

Heat accumulation / Dewar 500 ml (SADT, UN-Test H.4, 28.4.4)

Minimum ignition energy:

(VDI 2263, sheet 1, 2.5)

The product is capable of dust explosion.

Bulk density: approx. 500 kg/m3

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

Dust explosion hazard.

Conditions to avoid

Avoid dust formation. See SDS section 7 - Handling and storage. Avoid electro-static charge.

Incompatible materials

Substances to avoid:

None known during use and storage if used according to instructions.

Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

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Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl

acetate

Experimental/calculated data:

LD50 rat (oral): > 10.000 mg/kg (BASF-Test)

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Experimental/calculated data:

LD50 rat (dermal): > 3.000 mg/kg (similar to OECD guideline 402)

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Experimental/calculated data:

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

Based on the ingredients, there is no suspicion of a skin-sensitizing potential.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Experimental/calculated data:

photo-allergy test guinea pig: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:

Based on the ingredients, there is no suspicion of a mutagenic effect.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammals.

Carcinogenicity

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Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment of carcinogenicity:

In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

Based on the ingredients, there is no suspicion of a teratogenic effect.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on available data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Based on available data, the classification criteria are not met.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment of repeated dose toxicity:

Repeated oral uptake of the substance did not cause substance-related effects.

Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

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The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Toxicity to fish:

LC50 (96 h) > 11 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)

The statement of the toxic effect relates to the analytically determined concentration. No toxic effects occur within the range of solubility.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Aquatic invertebrates:

EC50 (48 h) > 20,6 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The statement of the toxic effect relates to the analytically determined concentration. No toxic effects occur within the range of solubility.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Aquatic plants:

EC50 (72 h) > 27,8 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static) The statement of the toxic effect relates to the analytically determined concentration. No toxic effects occur within the range of solubility.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Microorganisms/Effect on activated sludge:

EC20 (30 min) > 927 mg/l, activated sludge, domestic (DIN EN ISO 8192, aquatic)

The details of the toxic effect relate to the nominal concentration.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Chronic toxicity to fish:

No observed effect concentration (28 d) > 100 mg/l, Oncorhynchus mykiss (OECD Guideline 215, semistatic)

No data available regarding toxicity to fish.

Persistence and degradability

Assessment biodegradation and elimination (H2O):

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Not readily biodegradable (by OECD criteria).

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment biodegradation and elimination (H2O):

Moderately/partially biodegradable. Not readily biodegradable (by OECD criteria). The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

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Bioaccumulative potential

Assessment bioaccumulation potential:

Accumulation in organisms is not to be expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment bioaccumulation potential:

Accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments:

Volatility: The substance will slowly evaporate into the atmosphere from the water surface. The ecological data given are those of the active ingredient.

Adsorption in soil: Adsorption to solid soil phase is expected. The ecological data given are those of the active ingredient.

Information on: 3,4-Dihydro-2,5,7,8-tetramethyl-2-(4,8,12-trimethyltridecyl)-2H-benzopyran-6-yl acetate

Assessment transport between environmental compartments:

Volatility: The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is expected.

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Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

13. Disposal Considerations

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Waste treatment methods

Observe national and local legal requirements.

Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Land transport

ADR

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable Not applicable UN proper shipping name: Transport hazard class(es): Not applicable Packing group: Not applicable Environmental hazards: Not applicable

Special precautions for None known

user **RID**

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable UN proper shipping name: Not applicable Transport hazard class(es): Not applicable Not applicable Packing group: Environmental hazards: Not applicable

Special precautions for

user

None known

Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable UN proper shipping name: Not applicable Transport hazard class(es): Not applicable Packing group: Not applicable Environmental hazards: Not applicable None known Special precautions for

user:

Transport in inland waterway vessel

Not evaluated

Sea transport

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IMDG

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number or ID number
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable

user

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.