

Safety data sheet

Vitamin A Palmitate 1.7 Mio IU/G stabilized with Tocopherol

Revision date : 2008/02/15

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Version: 1.0

(30041031/MDS_GEN_US/EN)

1. Substance/preparation and company identification

Company

BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

Synonyms:

Retinyl Palmitate

2. Composition/information on ingredients

CAS Number

79-81-2
10191-41-0

Content (W/W)

80.0 - 100.0 %
1.0 - 5.0 %

Chemical name

Vitamin A palmitate
D,L-alpha-Tocopherol

3. Hazard identification

Emergency overview

WARNING: CAUSES SKIN IRRITATION.

Prolonged or repeated contact may result in dermatitis.

CONTAINS MATERIAL THAT MAY ADVERSELY EFFECT THE DEVELOPING FETUS.

INGESTION MAY CAUSE GASTRIC DISTURBANCES.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation of mists/vapours.

Use with local exhaust ventilation.

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Wear NIOSH-certified chemical goggles.

Wear chemical resistant protective gloves.

Wear protective clothing.

Eye wash fountains and safety showers must be easily accessible.

Potential health effects**Primary routes of exposure**

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Information on: Vitamin A palmitate

Virtually nontoxic after a single ingestion.

Irritation:

Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes.

Information on: Vitamin A palmitate

Irritating to skin. Not irritating to the eyes.

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Sensitization:

Information on: Vitamin A palmitate

Animal studies do not fully exclude a skin sensitizing potential.

The product has not been tested. The statement has been derived from products of a similar structure and composition.

abgeleitet von Retinol

Repeated dose toxicity:

Information on: Vitamin A

Chronic overexposure to vitamin A is associated with low red blood count, low leukocyte count, joint/bone pain, fatigue, depression, skin rash, and liver & spleen abnormalities. Some cases of hypervitaminosis A, have resulted in bone changes and CNS effects. Animal studies have shown that vitamin A is teratogenic in several species. Women of child-bearing potential should avoid all occupational exposure to Vitamin A products.

Information on: Vitamin E

Ingestion of large amounts of vitamin E over long periods of time may cause gastrointestinal distress, muscle weakness, and fatigue.

4. First-aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Rinse mouth immediately and then drink plenty of water, seek medical attention.

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-fighting measures

Flash point: 139 °C (DIN 51758)

Autoignition: approx. 270 °C (DIN 51794)

Suitable extinguishing media:

water spray, carbon dioxide, dry extinguishing media, foam

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

NFPA Hazard codes:

Health : 2 Fire: 1 Reactivity: 0 Special:

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6. Accidental release measures

Personal precautions:

Handle in accordance with good industrial hygiene and safety practice.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Cleanup:

Dispose of absorbed material in accordance with regulations.

For small amounts: Pick up with suitable absorbent material. After taking up material in containers, cover immediately with water layer.

For large amounts: Dike spillage. Vacuum up spilled product.

7. Handling and storage

Handling

General advice:

Ensure that there is no crystallized product in the container before use.

Protection against fire and explosion:

Risk of self-ignition when a large surface area is produced due to fine dispersion. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Storage

General advice:

Keep container tightly closed and dry; store in a cool place. Protect from air. Protect from the effects of light.

Temperature tolerance

Protect from temperatures above: 60 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure controls and personal protection

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Wear chemical resistant protective gloves., Consult with glove manufacturer for testing data.

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

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General safety and hygiene measures:

Under no circumstances should the product come into contact with the skin of pregnant women or be inhaled by them. Handle in accordance with good industrial hygiene and safety practice. Wash soiled clothing immediately.

9. Physical and chemical properties

Form:	liquid, partially crystallized	
Odour:	mild	
Colour:	light yellow	
Melting point:	approx. 26 °C	
Vapour pressure:	0.01 mbar	(100 °C)
Density:	0.88 g/cm ³	(20 °C)
<i>Information on: Vitamin A palmitate</i>		
Partitioning coefficient n-octanol/water (log Pow):	15.51	(25 °C) (calculated)

Viscosity, dynamic:	44 mPa.s	(60 °C)
Solubility (qualitative):	soluble solvent(s): organic solvents,	

10. Stability and reactivity

Hazardous reactions:

When finely distributed, self-ignition is possible.

Decomposition products:

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

11. Toxicological information

Oral:

Information on: Vitamin A palmitate

LD50/rat/male/female: > 2,000 mg/kg (BASF-Test)

The product has not been tested. The statement has been derived from products of a similar structure and composition.

Skin irritation:

Information on: Vitamin A palmitate

rabbit: Irritant. (BASF-Test)

Eye irritation :

Information on: Vitamin A palmitate

rabbit: non-irritant (OECD Guideline 405)

Genetic toxicity:

Information on: Vitamin A palmitate

In the majority of tests performed (microorganisms) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays.

Literature data.

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Developmental toxicity/teratogenicity:

Information on: Vitamin A palmitate

In animal studies the substance showed a developmental toxic/teratogenic effect.

Literature data.

12. Ecological information

Environmental fate and transport

Biodegradation:

Test method: OECD Guideline 301 F (aerobic), activated sludge, domestic

Method of analysis: BOD of the ThOD

Degree of elimination: 50 - 60 % (28 d)

Evaluation: Not readily biodegradable (by OECD criteria).
Moderately/partially biodegradable.

Information on: Vitamin A palmitate

*Evaluation: Not readily biodegradable (by OECD criteria).
Moderately/partially biodegradable.*

Information on: Vitamin A palmitate

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

Information on: Vitamin A palmitate

Acute and prolonged toxicity to fish:

DIN 38412 Part 15 static

golden orfe/LC50 (96 h): > 1,000 mg/l

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure and composition.

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Acute toxicity to aquatic invertebrates:

Screening test static

Daphnia magna/EC50 (48 h): > 100 mg/l

The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure and composition.

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Toxicity to microorganisms:

Directive 88/302/EEC, part C, p. 118 aquatic

activated sludge, domestic, non-adapted/EC20 (30 min): > 1,000 mg/l

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

DIN EN ISO 8192-OECD 209-88/302/EEC, P. C aerobic

activated sludge, domestic/EC20 (30 min): > 1,000 mg/l

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

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Container disposal:

Dispose of in accordance with national, state and local regulations.

14. Transport information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory information

Federal Regulations

Registration status:

TSCA, US

released / listed

OSHA hazard category:

Skin and/or eye irritant, Chronic target organ effects reported

SARA hazard categories (EPCRA 311/312): Acute, Chronic

State regulations

CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other information

HMIS III rating

Health: 2⁺

Flammability: 1

Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Local contact information

prod_reg@basf.com

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE , IT IS PROVIDED FOR YOUR

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