



The Chemical Company

HELPING MAKE PRODUCTS BETTER™

Safety data sheet

Lutavit® A/D3 1000/200 plus

Revision date : 2005/01/25
Version: 1.0

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(30157862/MDS_GEN_US/EN)

1. Substance/preparation and company identification

Company
BASF Corporation
100 Campus Drive
Florham Park, NJ 07932

24 Hour Emergency Response Information
CHEMTREC: (800) 424-9300
BASF HOTLINE: (800) 832-HELP

2. Composition/information on ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
127-47-9	<= 40.0 %	Vitamin A Acetate
9000-70-8	<= 40.0 %	Gelatins
91-53-2	<= 10.0 %	ethoxyquin
8029-43-4	<= 5.0 %	Syrups, hydrolyzed starch
7732-18-5	<= 5.0 %	water
7631-86-9	<= 5.0 %	Silicon dioxide
7558-79-4	<= 5.0 %	disodium hydrogen orthophosphate
67-97-0	<= 5.0 %	9,10-Secocholesta-5,7,10(19)-trien-3-ol, (3.beta.,5Z,7E)-

3. Hazard identification

Emergency overview

WARNING: HARMFUL IF INHALED.
HARMFUL IF SWALLOWED.
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
Avoid inhalation of dusts.
Wear chemical resistant protective gloves.
Wear safety glasses with side-shields.
Wear protective clothing.
Avoid contact with the skin, eyes and clothing.
Self heating possible in the presence of air.

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:

Harmful by inhalation. Harmful if swallowed.
Information on: retinyl acetate
Virtually nontoxic after a single ingestion.
Information on: Vitamin D3
Toxic in contact with skin and if swallowed.
Very toxic by inhalation.

Irritation:

Irritating to skin. Irritating to respiratory system. Contact may result in eye irritation.

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4. First-aid measures

General advice:

First aid personnel should pay attention to their own safety. Remove contaminated clothing.

If inhaled:

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

If on skin:

Wash thoroughly with soap and water.

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

Self-ignition temperature: approx. 173 °C

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: 1 Special:

6. Accidental release measures

Personal precautions:

Wear suitable personal protective clothing and equipment. Ensure adequate ventilation. Avoid dust formation.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Cleanup:

Correctly dispose of recovered product immediately.

For small amounts: Sweep/shovel up.

For large amounts: Sweep/shovel up.

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7. Handling and storage**Handling****General advice:**

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:

Dust can form an explosive mixture with air. Containers should be grounded against electrostatic charge.

Storage**General advice:**

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

Specific:

Storage stability:

Storage temperature: < 25 °C

8. Exposure controls and personal protection**Components with workplace control parameters**Silicon dioxide OSHA ;
ACGIH TWA value 10 mg/m3 ;**Personal protective equipment****Respiratory protection:**

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

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other, Supplementary note: The specifications are based on own tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Eye protection:

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

Body protection:

Body protection must be chosen based on level of activity and exposure.

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.

9. Physical and chemical properties

Form: free flowing fine granules
Bulk density: approx. 550 kg/m³
Information on: retinyl acetate
Partitioning coefficient n-octanol/water (log Pow): 9.4 (25 °C) (measured)

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Solubility in water:

sparingly soluble

10. Stability and reactivity

Minimum ignition energy:
10 - 30 mJ**Conditions to avoid:**

Avoid dust formation. Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static charge. Avoid heat.

Substances to avoid:

No substances known that should be avoided.

Hazardous reactions:

Dust explosion hazard.

Decomposition products:

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

Thermal decomposition:

>= 170 °C

Risk of spontaneous ignition when exposed to air at indicated temperature.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

11. Toxicological information

Oral:*Information on: retinyl acetate**LD50/rat: > 2,000 mg/kg (BASF-Test)**Information on: Vitamin D3**LD50/rat: 35 - 47 mg/kg**Literature data.***Inhalation:***Information on: Vitamin D3**LC50/rat: approx. 0.13 - 0.38 mg/l / 4 h**Literature data.***Dermal:***Information on: Vitamin D3**LD50/rat: 61 - 185 mg/kg**Literature data.*

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Skin irritation:

Information on: retinyl acetate
rabbit: Irritant. (OECD Guideline 404)

Eye irritation :

Information on: retinyl acetate
rabbit: non-irritant (OECD Guideline 405)

Genetic toxicity:

Information on: retinyl acetate
Most of the results from the numerous studies available show no evidence of a mutagenic effect.
Literature data.
Information on: Vitamin D3
No mutagenic effect was found in various tests with bacteria, microorganisms and mammalian cell culture.
Literature data.

Developmental toxicity/teratogenicity:

Information on: retinyl acetate
In animal studies the substance showed a developmental toxic/teratogenic effect.
Literature data.
Information on: Vitamin D3
The potential to cause toxicity to development cannot be excluded when given in high doses.
After the uptake of small doses toxicity to development will not be expected in humans.
Information on: Retinol Marken

12. Ecological information

Information on: retinyl acetate
Acute and prolonged toxicity to fish:
DIN 38412 Part 15 static
golden orfe/LC50 (96 h): = > 220 < 460 mg/l
The details of the toxic effect relate to the nominal concentration.

Information on: Vitamin D3
Acute and prolonged toxicity to fish:
DIN 38412 Part 15 static
golden orfe/LC50 (96 h): > 10,000 mg/l
The product has low solubility in the test medium. An aqueous dispersion has been tested. Tested above maximum solubility. The details of the toxic effect relate to the nominal concentration.

Information on: retinyl acetate
Toxicity to aquatic plants:
OECD Guideline 201 static
green algae/EC50 (72 h): > 100 mg/l
The details of the toxic effect relate to the nominal concentration.

Information on: Vitamin D3
Toxicity to aquatic plants:
OECD Guideline 201 static



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green algae/EC50 (96 h) 100 mg/l
The product has low solubility in the test medium. An eluate has been tested. The details of the toxic effect relate to the nominal concentration. No toxic effects occur within the range of solubility.

13. Disposal considerations

Waste disposal of substance:
Incinerate or dispose of in a licensed facility.
Do not discharge substance/product into sewer system.
This product is not regulated by RCRA.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in accordance with official regulations after being thoroughly cleaned.

14. Transport information

Reference Bill of Lading

15. Regulatory information

Federal Regulations

Registration status: released / listed

State regulations

State RTK

CAS Number

7631-86-9
7558-79-4

Chemical name

Silicon dioxide
disodium hydrogen orthophosphate

State RTK

MA, NJ, PA
MA, NJ, PA

16. Other information

HMIS III rating

Health: 2 Flammability: 1 Physical hazard: 1

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.

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