

# Safety Data Sheet

## Dry Vitamin AD2 Acetate 500/50, 60 Mesh

Revision date : 2009/08/25

Version: 1.0

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(30041006/SDS\_GEN\_CA/EN)

### 1. Product and Company Identification

Company

BASF Canada Inc.  
100 Milverton Drive  
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information

CANUTEC (reverse charges): (613) 996-6666  
BASF HOTLINE: (800) 454-COPE (2673)

### 2. Hazards Identification

Emergency overview

Contains a suspect teratogen.  
Irritating to skin.

State of matter: solid  
Colour: yellowish  
Odour: mild

Potential health effects

### 3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Hazardous ingredients</u>
127-47-9	10.0 - 30.0 %	retinyl acetate

### 4. First-Aid Measures

**General advice:**

Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). First aid personnel should pay attention to their own safety.

**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:**

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

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**If swallowed:**

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

**Note to physician**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### 5. Fire-Fighting Measures

Flash point: not applicable

**Suitable extinguishing media:**

water spray, carbon dioxide, foam, dry extinguishing media

**Protective equipment for fire-fighting:**

Wear a self-contained breathing apparatus.

**Further information:**

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

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### 6. Accidental release measures

**Personal precautions:**

Avoid dust formation.

**Cleanup:**

Avoid raising dust.

For large amounts: Sweep/shovel up.

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### 7. Handling and Storage

**Handling**

**General advice:**

Avoid dust formation. Ensure thorough ventilation of stores and work areas.

**Protection against fire and explosion:**

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 the effects of light.

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### 8. Exposure Controls and Personal Protection

**Personal protective equipment**

**Respiratory protection:**

Wear respiratory protection if ventilation is inadequate.

**Hand protection:**

Chemical resistant protective gloves (EN 374)

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### Eye protection:

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

### Body protection:

Impermeable protective clothing

### General safety and hygiene measures:

Wash soiled clothing immediately.

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## 9. Physical and Chemical Properties

Form:	powder	
Odour:	mild, pleasant	
Odour threshold:	No data available.	
Colour:	yellowish	
Bulk density:	approx. 600 kg/m <sup>3</sup>	
<i>Information on: retinyl acetate</i>		
Partitioning coefficient n-octanol/water (log Pow):	9.4	( 25 °C) (measured)
<i>Information on: Vitamin D2</i>		
Partitioning coefficient n-octanol/water (log Pow):	> 6.2	(measured)
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Solubility in water:		( 35 - 40 °C) emulsifiable

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## 10. Stability and Reactivity

### Hazardous reactions:

Dust explosion hazard.

### Decomposition products:

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

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## 11. Toxicological information

### Acute toxicity

*Information on: retinyl acetate*  
*Assessment of acute toxicity:*  
*Virtually nontoxic after a single ingestion.*  
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### Oral:

*Information on: retinyl acetate*  
*Type of value: LD50*  
*Species: rat*  
*Value: > 2,000 mg/kg (BASF-Test)*  
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### Irritation / corrosion

*Information on: retinyl acetate*  
*Assessment of irritating effects:*  
*Skin contact causes irritation. Not irritating to the eyes.*  
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### Skin:

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*Information on: retinyl acetate*  
*Species: rabbit*  
*Result: Irritant.*  
*Method: OECD Guideline 404*  
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### Eye:

*Information on: retinyl acetate*  
*Species: rabbit*  
*Result: non-irritant*  
*Method: OECD Guideline 405*  
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### 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 D2*  
*No mutagenic effect was found in various tests with microorganisms and mammalian cell culture.*  
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### Development:

*Information on: retinyl acetate*  
*The substance caused malformations/developmental toxicity in laboratory animals. Literature data.*  
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## 12. Ecological Information

### Aquatic toxicity

*Information on: retinyl acetate*  
*Assessment of aquatic toxicity:*  
*Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.*  
*Information on: Vitamin D2*  
*Assessment of aquatic toxicity:*  
*There is a high probability that the product is not acutely harmful to aquatic organisms. No toxic effects occur within the range of solubility. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from products of a similar structure and composition.*  
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### Fish

*Information on: retinyl acetate*  
*Acute:*  
*OECD Guideline 203 static*  
*Brachydanio rerio/LC50 (96 h): 316.23 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. The product has low solubility in the test medium. An aqueous dispersion has been tested.*

*Information on: Vitamin D2*  
*Acute:*  
*DIN 38412 Part 15 static*  
*Leuciscus idus/LC50 (96 h): > 10,000 mg/l*  
*Analogous: Assessment derived from products with similar chemical character.*  
*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.*  
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### Aquatic invertebrates

*Information on: retinyl acetate*

*Information on: Vitamin D2*

*Acute:*

*OECD Guideline 202, part 1 static*

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

*Analogous: Assessment derived from products with similar chemical character.*

*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.*

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### Aquatic plants

*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 D2*

*Toxicity to aquatic plants:*

*OECD Guideline 201 static*

*green algae/EC50 (96 h): > 100 mg/l*

*Analogous: Assessment derived from products with similar chemical character.*

*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.*

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### Microorganisms

*Information on: Vitamin D2*

*Toxicity to microorganisms:*

*OECD Guideline 209 aerobic*

*activated sludge, domestic/EC20 (0.5 h): > 1,000 mg/l*

*Analogous: Assessment derived from products with similar chemical character.*

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### Degradability / Persistence Biological / Abiological Degradation

*Information on: retinyl acetate*

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

*Method of analysis: CO2 formation relative to the theoretical value*

*Degree of elimination: 30 - 40 % (28 d)*

*Information on: Vitamin D2*

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

*Method of analysis: BOD of the ThOD*

*Degree of elimination: < 10 % (28 d)*

*Evaluation: Evaluation: Analogous: Assessment derived from products with similar chemical character.*

*Not readily biodegradable (by OECD criteria).*

*Moderately/partially biodegradable.*

*Poorly biodegradable.*

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

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### Bioaccumulation

*Information on: retinyl acetate*

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*calculated*

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

*Information on: Vitamin D2*

*Accumulation in organisms is expected.*  
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### 13. Disposal considerations

**Waste disposal of substance:**

Observe national and local legal requirements.

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### 14. Transport Information

**Land transport**  
TDG

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

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### 15. Regulatory Information

**Federal Regulations**

**Registration status:**

Chemical            DSL, CA        released / listed

Food                DSL, CA        released / listed

**WHMIS classification:** D2B: Materials Causing Other Toxic Effects - Toxic material



**THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.**

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### 16. Other Information

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BASF supports worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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### Local Contact Information

BASF Canada Product Safety  
289-360-1300

END OF DATA SHEET