

Safety data sheet

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BASF Australia Limited Safety data sheet
Date / Revised: 18.04.2006
Product: **Dry Vitamin K1 5% GFP**

Version: 1.0

(30041002/SDS_GEN_AU/EN)

Date of print 20.04.2006

1. Substance/preparation and company identification

Dry Vitamin K1 5% GFP

Use: Vitamin

Company:

BASF Australia Limited (ABN 62 008 437 867)
500 Princes Highway Noble Park
Victoria 3174 Australia
Telephone: +61 3 9212 1500
Telefax number: +61 3 9212 1511

Emergency information:

1800 803 440 (24h) [within Australia]
+61 3 9212 1666 [outside Australia]

2. Hazard identification

none

3. Composition/information on ingredients

Chemical nature

preparation, phytomenadione (Content (W/W): 5 %)
CAS - Nr.: 84-80-0 EG - Nr.: 201-564-2

in a matrix of: Glucose, gum arabic, Tricalciumphosphat

4. First-aid measures

General advice:

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 plenty of water.

Note to physician:

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-fighting measures

Suitable extinguishing media:

water, carbon dioxide, dry extinguishing media, foam

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

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

6. Accidental release measures

Personal precautions:

Avoid dust formation.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Sweep/shovel up.

For large amounts: Sweep/shovel up.

Dispose of absorbed material in accordance with regulations.

7. Handling and storage

Handling

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

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Protection against fire and explosion:

Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. The product is combustible.

Storage

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

8. Exposure controls and personal protection

Components with workplace control parameters

none

no exposure standard allocated

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1)

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), butyl rubber (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 determined permeation time.

Eye protection:

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

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

| | |
|----------------------|----------------------------|
| Form: | free flowing fine granules |
| Colour: | yellowish |
| Bulk density: | 600 kg/m ³ |
| Solubility in water: | dispersible |

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10. Stability and reactivity

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

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

11. Toxicological information

Information on: phytomenadione
LD50/oral/rat: > 33,000 mg/kg

Information on: phytomenadione
Primary skin irritation: Non corrosive. (Epiderm Corrosivity Test)

Information on: phytomenadione
Primary irritations of the mucous membrane: The substance does not have a risk of serious damage to eyes. (HET-CAM test in vitro)

Further information:
Information on: phytomenadione
No mutagenic effect was found in various tests with microorganisms and mammalian cell culture.

Additional information:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

12. Ecological information

Ecotoxicity

Information on: phytomenadione
Toxicity to fish:
OECD Guideline 203 static
Pimephales promelas/LC50 (96 h): > 100 mg/l
The details of the toxic effect relate to the nominal concentration.

Information on: phytomenadione
Aquatic invertebrates:
Screening test static

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

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An eluate has been tested. No toxic effects occur within the range of solubility.

Information on: phytomenadione

Aquatic plants:

Screening test static

Desmodesmus subspicatus/EC50 (72 h): > 100 mg/l

The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An eluate has been tested. Toxic effects occur within the range of solubility.

Information on: phytomenadione

Microorganisms/Effect on activated sludge:

Screening test aquatic

activated sludge, domestic/EC20 (30 min): > 100 mg/l

Information on: phytomenadione

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Persistence and degradability

Elimination information

Information on: phytomenadione

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

Method of analysis: BOD of the ThOD

Degree of elimination: 20 - 30 % (28 d)

Information on: phytomenadione

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

Bioaccumulation potential

Information on: phytomenadione

Accumulation in organisms is expected.

Additional information

Other ecotoxicological advice:

Do not release untreated into natural waters.

13. Disposal considerations

Observe national and local legal requirements.

14. Transport information

Not classified as a dangerous good under transport regulations (ADR RID ADNR IMDG/GGVSee ICAO/IATA)

15. Regulatory information

Regulations of the European union (Labelling)

not subject to labelling

Other regulations

16. Other information

Vertical lines in the left hand margin indicate an amendment from the previous version.

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. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.