MenaQ7 PharmaPure MCC Powder

Safety Data Sheet

MenaQ7 Vitamin K2 as MK-7

Doc.: SDS-Q-11 Rev. 4

1. IDENTIFICATION

Product form: Edible powder containing vitamin K2 as MK-7
Product name: MenaQ7 PharmaPure 1000ppm MCC Powder
MenaQ7 PharmaPure 2000ppm MCC Powder
MenaQ7 PharmaPure 10,000ppm MCC Powder
Product item code: NP-0299-10101
NP-0299-10103
NP-0299-10104

Intended use of substance: Food supplement

Company name and address: NattoPharma ASA, Lilleakerveien 2b, 0283 Oslo, Norway
Telephone: +47 40 00 90 08

2. HAZARD IDENTIFICATION

Special information: None
Hazard classifications: Does not fall into any hazard classifications
Hazard pictograms: Not applicable
Non-classified hazards: Has potential to form dust explosion

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical	CAS	Concentration
Menaquinone-7	2124-57-4	0.1 - 1%
MCC powder	9004-34-6	98.5 - 99%
MCT oil	N/A	0.9 - 9%

None of the ingredients are classified as hazardous.

4. FIRST AID MEASURES

General information: In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation: Move to fresh air. Call a physician if symptoms develop or persist.

After skin contact: Wash with soap and water. Call a physician if symptoms develop or persist.

Following eye contact: Rinse thoroughly with water. Get medical attention if symptoms develop or persist.

After ingestion: Drink plenty of water. Never give anything by mouth to an unconcious person. Persons receiving anticoagulant therapy, like warfarin or coumarins, should notify their physician. Product contains vitamin K which interferes with the biological activity of some anticoagulants.

Information to physician: Treat symptoms. Product has low, dermal, inhalation toxicity and is non-irritating to eye and skin.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:
Water spray. Carbon dioxide (CO2). Foam. Extinguishing powder.

Special hazards arising from chemical:
Dispersed powder in air has potential of creating dust explosion hazard. Minimize airborne dust generation and eliminate source of ignition.

Special protective equipment and precautions for fire fighters:
Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:
Avoid dust formation or breathing dust. Dry and wet compound may be slippery.

Methods for containment and cleaning up:
Sweep up, collect and dispose appropriately. Avoid creating dust.

7. HANDLING AND STORAGE

Handling:
Avoid creating dust in confined spaces.

Storage:
Keep container tightly closed, may be stored in temperatures between 5 °C and 25 °C (RH: 30-50%). After opening the container, use as soon as possible or tightly close the container and store in refrigerator.

Store in dark. Store away from incompatible materials such as oxidizing agents and materials with high alkaline levels.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION EQUIPMENT

Exposure limit values:

Substance:	Cellulose
CAS-No.:	9004-34-6
EC-No. (EINECS/ELINCS):	232-674-9
OEL(CA-QUEBEC, CA ONTARIO, NZ):	10 mg/m³
OEL(GB):	10 mg/m³ inhalable aerosol ; 4 mg/m³ respirable aerosol
OEL(NZ):	10 mg/m³
OEL(US-OSHA):	15 mg/m³ total dust; 5 mg/m³ respirable dust
Engineering controls:	Use with local ventilation or respiratory protection required in the case of dust formation.
Personal protection:	
Respiratory protection:	Half-mask with filter according to EN 149 when irritation or exposure limits are exceeded.
Hand protection:	No special protection required.
Eye protection:	Dust protection goggles or safety glasses.
Skin protection:	No special protection required.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to light yellow powder	Density at 20°C	Approx 1.5 g/cm³
Odor	Odorless	Solubility in water	Insoluble
Odor threshold	No information available	Solubility in oil	Insoluble
pH	5 - 7	Partician coefficient (n-octanol/water)	Not determined
Melting point/freezing point	Not applicable	Auto-ignition temp	Not available
Initial boiling temperature/ boiling range	Not applicable	Decompostion temp	Approx 200°C
Flash point	Not determined	Viscosity	Not applicable
Evaporation rate	Not applicable	Solvent content	0%
Flammability	Not applicable	Package density	280 - 330 kg/m³
Lower explosion limit	Approx 30 g/m³	Explosion hazard	Potential dust explosive
Upper explosion level	Approx 11,000 g/m³	Ignition temperature	Not determined
Oxidizing characteristics	Not oxidizing		
Vapor pressure	Not determined		
Vapor density	Not applicable		

10. STABILITY AND REACTIVITY

Chemical stability:
This product is stable when handled and stored in ambient conditions.

Conditions to avoid:
Dust formation and static discharge.

Hazardous decomposition products:
Sulphur dioxide. Burning causes obnoxious and toxic fumes.

Possible hazardous reactions:
None. Material will not polymerize.

Incompatible materials:
None in particular.

Additional information:
Protect from light exposure.

11. TOXICOLOGICAL INFORMATION

Most likely routes of exposure:
Skin and inhalation.

Symptoms:
Potential irritation of respiratory tract or eyes. No known hazards by inhalation, skin or eye exposure.

Method:
Risk assessment based on values and information of ingredients found in literature.

Skin irritation	Non-irritating
Eye irritation	Non-irritating
Acute dermal	No indication
Acute oral	> 5000mg/kg
Inhalation	> 5.8mg/l/4hrs
Sensitization	Not a sensitizer
Mutagenicity	Not mutagenic
Target organ effects	No indication
Carcinogenicity	No indication
Teratogenicity	No indication

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Not expected to have significant environmental effects.

Microcrystalline cellulose LC50 >	100% for daphnia (48 hrs)
Rainbow trout	96 hrs
Algae	96 hrs

Mobility:
No information available.

Persistence and biodegradation:
Biodegradable.

Bioaccumulative potential:
No indication of bio-accumulation potential.

Results of PBT assessment:
This substance does not meet the criteria for classification as PBT or vPvB.

Other harmful effects:
None known.

Further ecological information:
Negative ecological effects are not expected.

13. DISPOSAL CONSIDERATIONS

Appropriate disposal of product: waste disposal according to official state regulations.

14. TRANSPORT INFORMATION

Overland transport (ADR/RID): Not a hazardous material.
Transport by sea (IMDG): Not a hazardous material.
Air transport: Not a hazardous material.

15. REGULATORY INFORMATION

Novel Food: Approved.

16. OTHER INFORMATION

Further remarks:
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge.

The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal.

The information cannot be transferred to other products.

In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

	Health	Fire/ Flammability	Reactivity	Physical Hazard	Special
NFPA Diamond	0	1	0		0
HMIS Rating	0	1		0	