

Material Safety Data Sheet (MSDS)

Product Name: Vitamin K1 Liquid IP Grade

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

1101- City Centre 2,

Science City Road,

Sola Ahmedabad Gujarat,

India - 380060.

Contact No.: +91 97272 88479

Email: info@rawpharmabiz.com

Website: www.rawpharmabiz.com

1. Identification of the Substance and Company

Product Name: Vitamin K1 Liquid IP Grade

Synonyms: Phytomenadione, Phylloquinone, Vitamin K1

CAS No.: 84-80-0

Molecular Formula: C₃₁H₄₆O₂

Molecular Weight: 450.70 g/mol

Recommended Use: Pharmaceutical, Nutraceutical, Food Fortification, Dietary Supplements

2. Hazard Identification

GHS Classification: Not classified as hazardous under normal conditions of use.

Signal Word: None

Hazard Statements:

- May cause mild irritation to eyes and skin upon prolonged exposure.
- Inhalation of mists may cause respiratory discomfort.

Precautionary Statements:

- Avoid contact with eyes and skin.
- Use appropriate personal protective equipment.
- Keep away from excessive heat and direct sunlight.

3. Composition / Information on Ingredients

Component	CAS No.	Content
Vitamin K1 (Phytomenadione)	84-80-0	As per specification
Carrier Oil / Stabilizers	Proprietary	Balance

4. First Aid Measures**Eye Contact**

Flush immediately with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

Skin Contact

Wash thoroughly with soap and water. Remove contaminated clothing.

Inhalation

Move affected person to fresh air. Obtain medical attention if symptoms persist.

Ingestion

Rinse mouth with water. Seek medical advice if large quantities are swallowed.

5. Fire Fighting Measures**Suitable Extinguishing Media**

- Dry Chemical Powder
- Carbon Dioxide (CO₂)
- Foam
- Water Spray

Unsuitable Media

- High-pressure water jet

Hazardous Combustion Products

- Carbon Oxides
- Smoke and irritating fumes

Protective Equipment

Wear self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures

Personal Precautions

- Wear protective gloves and safety glasses.
- Avoid contact with eyes and skin.

Environmental Precautions

Prevent product from entering drains and waterways.

Clean-Up Procedures

Absorb with inert material such as sand or vermiculite and place in suitable disposal containers.

7. Handling and Storage

Handling

- Use in well-ventilated areas.
- Avoid unnecessary exposure.
- Follow good industrial hygiene practices.

Storage

- Store in tightly closed, light-resistant containers.
- Protect from heat, moisture, and direct sunlight.
- Recommended storage temperature: 2°C–8°C or as specified by manufacturer.

8. Exposure Controls / Personal Protection

Engineering Controls

Provide adequate ventilation.

Personal Protective Equipment

Eye Protection

- Safety goggles

Hand Protection

- Chemical-resistant gloves

Skin Protection

- Protective clothing

Respiratory Protection

- Not normally required under recommended conditions.

9. Physical and Chemical Properties

Property	Specification
Appearance	Clear yellow to amber liquid
Odor	Characteristic
Solubility	Insoluble in water
Specific Gravity	Approx. 0.94–0.98
Flash Point	Not established
pH	Not applicable
Boiling Point	Not available
Melting Point	Not applicable
Density	As per specification

10. Stability and Reactivity

Stability

Stable under recommended storage conditions.

Conditions to Avoid

- Heat
- Direct sunlight
- Oxidizing environments

Incompatible Materials

- Strong oxidizing agents

Hazardous Decomposition Products

- Carbon monoxide
- Carbon dioxide

11. Toxicological Information

Acute Toxicity

Not expected to present acute toxicity under normal conditions.

Skin Irritation

May cause mild irritation upon prolonged exposure.

Eye Irritation

May cause temporary irritation.

Sensitization

No known sensitizing effects.

Chronic Effects

No known chronic hazards under intended use conditions.

12. Ecological Information

Ecotoxicity

No significant ecological hazards known.

Persistence and Degradability

Expected to be biodegradable over time.

Bioaccumulation

No significant bioaccumulation expected.

Mobility

Limited mobility in water due to low solubility.

13. Disposal Considerations

Dispose of material according to local, regional, and national regulations.

Recommended Disposal Method

- Approved waste disposal facility
- Incineration where permitted

Do not discharge into drains or natural waterways.

14. Transport Information

UN Number: Not regulated as dangerous goods.

UN Proper Shipping Name: Not regulated.

Transport Hazard Class: Not classified.

Packing Group: Not applicable.

Environmental Hazards: Not classified as environmentally hazardous for transport.

Road Transport (ADR/RID): Not regulated.

Sea Transport (IMDG): Not regulated.

Air Transport (IATA): Not regulated.

Special Precautions for Transport

- Transport in tightly sealed original containers.
- Protect from direct sunlight, moisture, and excessive heat.
- Avoid freezing and excessive temperature fluctuations.
- Keep containers upright during transportation.
- Prevent physical damage to containers.
- Protect from contamination by incompatible materials.
- Maintain recommended storage conditions throughout shipment.
- Ensure proper labeling and documentation during transportation.

15. Regulatory Information

This product should be handled in accordance with applicable local, national, and international regulations governing pharmaceutical and food-grade materials.

Applicable regulations may include:

- GHS (Globally Harmonized System)
- Food Safety Regulations

- Pharmaceutical Ingredient Regulations
- Workplace Safety Regulations

16. Other Information

The information contained herein is believed to be accurate and represents the best information currently available. Users should conduct their own investigations to determine suitability for their specific applications. No warranty, expressed or implied, is made regarding the accuracy or completeness of this information.

- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.