

SPECIFICATION

Product Name: Vitamin K1 Liquid IP Grade
Chemical Formula: C ₃₁ H ₄₆ O ₂
C9AS Number: 84-80-0
Molecular Weight: 450.70 g/mol
Appearance: A clear intense yellow, Viscous oil liquid
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification By (1) Infrared Spectrum (2) Ultraviolet Spectrum	- -	Conforms Conforms	Conformance with standard spectrum Absorptivities don't differ by more than 3.0%
Refractive Index	-	1.526	1.523 ~ 1.526
Limit of menadione	-	Conforms	No purple or blue color is produced
Sulphated Ash	%	0.05%	NMT 0.1
Reaction	-	Conforms	A 50mg/ml solution of phytonadione in dehydrated alcohol is neutral to litmus
Assay	%	99.5%	97.0% ~ 103.0%
Z isomer content	%	8.3%	NMT 21.0%
Acid Value	-	1.2	NMT 2.0
Bacterial Endotoxin Test	-	Conforms	NMT 12 EU/mg

Physical Properties

- Solubility: Practically insoluble in water. Soluble in ethanol. Freely soluble in chloroform. Soluble in Hexane. Slightly soluble in ether. Soluble in acetone.

Shelf Life & Storage

- Shelf Life: 4 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed, light-resistant container in a cool, dry place, protected from light, heat, moisture, and air.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, food fortification, and dietary supplement formulations.
- Dosage: Depends on Age and Nutritional status, Product formulation, Regulatory guidelines, Intended health application.

Packaging

- Standard Packing: 1 Liter and 100 grams as per customer requirement.
 - Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.
- * Specifications are based on the manufacturer's provided specifications.