

SPECIFICATION

Product Name: Vitamin K1 5% Powder
Chemical Formula: C ₃₁ H ₄₆ O ₂
CAS Number: 84-80-0
Molecular Weight: 450.70 g/mol
Appearance: Primrose powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Mesh size	μm	130 μm	<180 μm
Loss on drying	%	2.14%	≤5.0%
Residue on ignition	%	0.16%	≤5.0%
Ferrite	PPM	Conform	≤50 PPM
Lead	PPM	<3 PPM	<3 PPM
Cadmium	PPM	<1 PPM	<1 PPM
Mercury	PPM	<0.1 PPM	<0.1 PPM
Arsenic	PPM	<1 PPM	<1 PPM
VK1 Assay	%	5.31%	≥5.0%
Total plate count	cfu/g	Complies	<250 cfu/g
Yeast & mold	cfu/g	Complies	<50 cfu/g
Coliforms	cfu/g	Absent	<3 cfu/g

E. coli	cfu/g	Absent	<10 cfu/g
Staphylococcus aureus	cfu/g	Complies	<10 cfu/g
Salmonella	-	Absent	Negative (Absent in 25g)

Physical Properties

- Solubility: Soluble in water. Soluble in ethanol. Soluble in oils. Soluble in ether. Soluble in chloroform.

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.
 - Storage Conditions: Store in a cool, dry place at 2–8°C (or as recommended by the manufacturer). Protect from light, heat, moisture, and oxygen, as Vitamin K1 is sensitive to these conditions. Keep the container tightly closed in the original, light-resistant, properly labeled container and store in a well-ventilated area to maintain product potency and stability. Avoid prolonged exposure to elevated temperatures and humidity.

Applications

- Use: Widely used as a source of vitamin K1 (phyloquinone) in pharmaceutical, nutraceutical, and food fortification formulations. It supports normal blood clotting, bone health, and calcium metabolism. It is commonly incorporated into tablets, capsules, powders, sachets, multivitamin preparations, infant nutrition products, fortified foods, and dietary supplements for the prevention and treatment of vitamin K deficiency and to help maintain normal coagulation function.
 - Dosage: Depends on the intended formulation, patient age, nutritional status, and therapeutic indication. It should be used according to product specifications or as directed by a qualified healthcare professional.

Packaging

- Standard Packing: 25 Kgs Fiber Drum, 1 Kgs and 100 Grams or 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.