

SPECIFICATION

Product Name: Vitamin K2 (Menaquinone- 7)
Chemical Formula: C ₄₆ H ₆₄ O ₂
CAS Number: 2124-57-4
Molecular Weight: 649.0 g/mol
Appearance: White to light yellow coloured powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min./Max.)
Identification (by HPLC)	-	Complies	The retention time of the principle peak in the chromatogram of sample preparation should correspond to that in the chromatogram of the standard preparation, as obtained in the test of assay.
Loss on drying	%	3.00%	NMT 5.0%
Menaquinone-6 content by HPLC	%	0.000	NMT 10% of the labelled amount of menaquinone-7.
Menaquinone-7 content by HPLC	PPM	1295.0	NMT 1000 PPM
Content of cis- Menaquinone-7 (% area)	%	0.320	NMT 2.0%
Microbiological parameters			
TAMC	cfu/g	150.0	NMT 10000 cfu/g
TYMC	cfu/g	<10 cfu/g	NMT 100 cfu/g
E.coli	Absent/g	Absent	Should be absent/g
Salmonella	Absent/g	Absent	Should be absent /25g
Staphylococcus aureus	Absent/g	Absent	Should be absent/g

Physical Properties

- Solubility: Soluble in water. Insoluble in ethanol. Insoluble in acetone.

Shelf Life & Storage

- Shelf Life: 2 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry place at 15–25°C, away from heat, direct sunlight, and moisture. Keep the container tightly closed in the original packaging and store in a well-ventilated area to prevent moisture absorption and maintain product quality and gelling performance.

Applications

- Use: Widely used as a gelling agent, thickener, stabilizer, and texturizing agent in food and beverage products. It is commonly used in jams, jellies, fruit preserves, confectionery, dairy products, bakery fillings, fruit juices, and beverages to improve texture, viscosity, gel formation, and product stability. It is also used as a source of soluble dietary fiber in functional foods and nutraceutical formulations.
- Dosage: Depends on the intended application, desired gel strength, viscosity, and product formulation. In food products, it should be used according to formulation requirements and applicable food regulations.

Packaging

- Standard Packing: 25 Kgs woven pp bag with inner liner, 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.