## Application Note: Vitamin K1 Isomers



HZAP-0038

Vitamin K1 (VK1), also known as phytonadione, chlorophyll menaquinone, chlorophyllone, chemical name 2-methyl-3-phytol-1, 4-naphthoquinone, is a polycyclic aromatic ketone, is a fat-soluble vitamin, is a liver synthesis factor II., VII., IX., X. necessary substances. The vitamin K1 injection based on this is a variety of the 2009 edition of the National Essential Medicines List, which is mainly used for the treatment of bleeding diseases caused by vitamin K deficiency.

In the quality control of vitamin K1, it is necessary to isolate its Z and E isomers, and the normal phase chromatography method is used in the pharmacopoeia method to achieve separation. Since users need to quantify both under reversed-phase conditions, the Horizon PFP column has successfully achieved separation of these two isomers by optimizing reverse phase mobile phase conditions.

