



CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA
Tel: (416) 665-9696, Fax: (416) 665-4439
Email: orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification

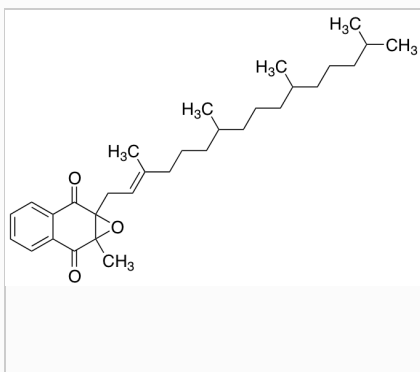
Catalogue Number: V680013

CAS Number: 25486-55-9

Product: Vitamin K1 2,3-Epoxy (Mixture of Diastereomers)

Synonym: 2,3-Epoxy-2,3-dihydro-2-methyl-3-phytyl-1,4-naphthoquinone; 1a,7a-Dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecenyl)naphth[2,3-b]oxirene-2,7-dione; 1a,7a-Dihydro-1a-methyl-7a-(3,7,11,15-tetramethyl-2-hexadecen-1-yl)naphth[2,3-b]oxirene-2,7-dione; 2,3-Epoxyphyloquinone; Phyloquinone Oxide; Epoxide Phyloquinone; Phyloquinone-2,3-epoxide; Vitamin K 2,3-Epoxy; Vitamin K Epoxide; Vitamin K Oxide; Vitamin K1 Oxide; Epoxide Vitamin K1;

Structure:



Molecular Formula:

$C_{31}H_{46}O_3$

Molecular weight:

466.7

Source of Product:

N/A

Solubility:

Chloroform (Soluble),
Methanol (Sparingly)

Lot Number: 21-ZEA-185-1

Purity: 96%

Shipping Condition: This Product Is Stable To Be Shipped At Room Temperature

Storage Condition: 4°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Elemental Analysis	Conforms	%C: 77.23, %H: 9.60
Appearance	Colourless to Yellow Oil to Thick Oil	Clear Colourless to Light Yellow Thick Oil
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
HPLC Purity	Report Result	99.62% (230 nm)
Specific Rotation	Report Result	0.0° (c = 0.2, Methanol)

Additional Information: N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of $\pm 2\%$. Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Nicole Yip	Toni Rantanen	Chanell Chu	9/24/2021	9/22/2025
				