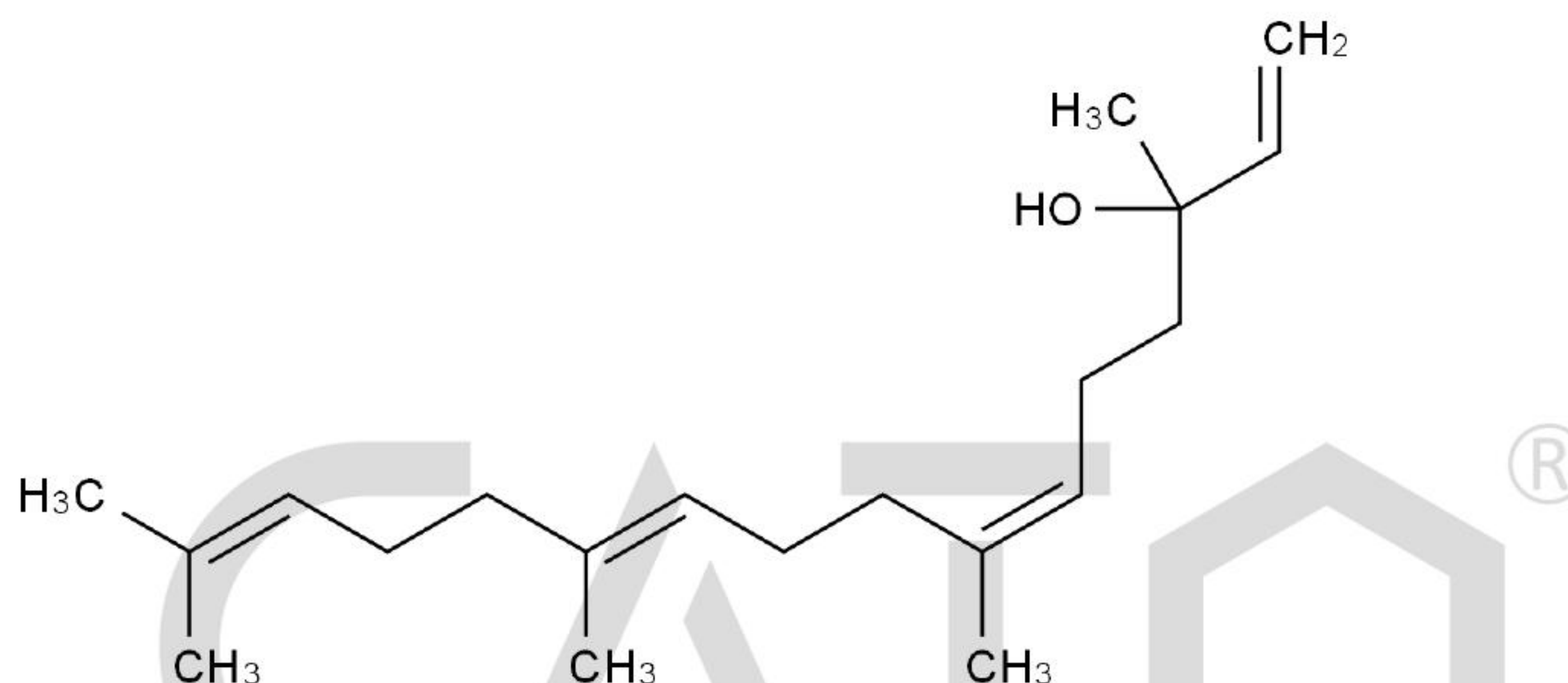


Certificate of Analysis

Reference Material & Standard

Product Name:	Menaquinone Impurity 12	Catalogue Number:	C4X-207612
Synonyms:	N/A	Lot Number:	0331-RG-0041
CAS Number:	3790-76-9	Expiry Date:	Jun 14, 2027
Molecular Formula:	C ₂₀ H ₃₄ O	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	290.48		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Colourless Oil
Identification	HRMS&HNMR	Confirmed
Purity	HPLC	96.638%
Water Content	Karl Fischer	1.77%
Residual Solvents	NMR	Not detected in NMR
Assay		94.9%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Water Content - Residual Solvents) * Purity HPLC (%) / 100%

Water Content and Residual Solvents are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Lily

Reviewed by:

Hin Lam

Approved by General Manager:

David

Date: Apr 01, 2025

Date: Apr 01, 2025

Date: Apr 01, 2025

