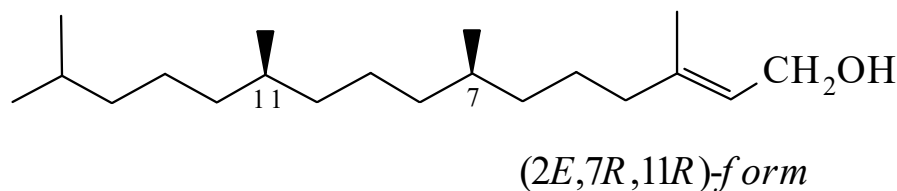




>>Entry Name: 2-Phyten-1-ol

ENTRY UNDER REVIEW

Synonym(s): 3,7,11,15-Tetramethyl-2-hexadecen-1-ol. **Phytol**



CAS Registry Number: 7541-49-3

Molecular Formula: C₂₀H₄₀O

Molecular Weight: 296.535

Accurate Mass: 296.307915

Percentage Composition: C 81.01%; H 13.60%; O 5.40%

Use/Importance: Used in preparation of vitamins E and K

Aldrich: 13991-2

Sigma: P3647

>>Variant: (2E,7R,11R)-form

CAS Registry Number: 150-86-7

Molecular Formula: C₂₀H₄₀O

Molecular Weight: 296.535

Accurate Mass: 296.307915

Percentage Composition: C 81.01%; H 13.60%; O 5.40%

Biological Source: Constit. of nettles and other plants

Physical Description: Oil

Boiling Point: Bp_{0.02} 132°

Optical Rotation: $[\alpha]_D^{18} +0.2$

UV: [neutral] $\lambda_{\max}$ 240 () (MeOH) (Berdy)

Hazard & Toxicity: Skin irritant. LD₅₀ (rat, orl) >5000 mg/kg

Aldrich: W50220-0

Fluka: 80191

Sigma: P5378

>>Derivative: Heptanoyl

Synonym(s): Phytyl heptanoate

CAS Registry Number: 145613-68-9

Molecular Formula: C₂₇H₅₂O₂

Molecular Weight: 408.707

Accurate Mass: 408.39673

Percentage Composition: C 79.35%; H 12.82%; O 7.83%

Biological Source: Constit. of *Bidens pilosa* and *Rosa roxburghii*

Physical Description: Oil

Boiling Point: Bp 159°

Optical Rotation: $[\alpha]_D^{28} -0.89$ (EtOH)

>>Derivative: 5,8,11,14,17-Eicosapentaenoyl(*all-Z*)

Synonym(s): Phytyl 5,8,11,14,17-eicosapentaenoate

CAS Registry Number: 94035-77-5

Molecular Formula: C₄₀H₆₈O₂

Molecular Weight: 580.976

Accurate Mass: 580.52193

Percentage Composition: C 82.70%; H 11.80%; O 5.51%

Biological Source: Isol. from *Navicula delognei*

Biological Use/Importance: Antibacterial agent

Physical Description: Oil

Solubility: BERDY SOL: Sol. CHCl₃, hexane; poorly sol. H₂O