



>>Entry Name: 11-Octadecenoic acid
ENTRY UNDER REVIEW

CAS Registry Number: 143-25-9
H3C(CH2)5CH=CH(CH2)9COOH

Molecular Formula: C₁₈H₃₄O₂
Molecular Weight: 282.465
Accurate Mass: 282.25588
Percentage Composition: C 76.54%; H 12.13%; O 11.33%

>>Variant: (*E*)-form
Synonym(s): Vaccenic acid

CAS Registry Number: 693-72-1

Molecular Formula: C₁₈H₃₄O₂
Molecular Weight: 282.465
Accurate Mass: 282.25588
Percentage Composition: C 76.54%; H 12.13%; O 11.33%

Biological Source: Occurs in small proportions in ruminant fats (e.g., butter) *via* biohydrogenation of dietary polyene acids. Main component of *Streptomyces pyogenes* protoplast lipids

Melting Point: Mp 43.5-44.1°
Sigma: V1131

>>Derivative: Me ester

CAS Registry Number: 6198-58-9
Molecular Formula: C₁₉H₃₆O₂
Molecular Weight: 296.492
Accurate Mass: 296.27153
Percentage Composition: C 76.97%; H 12.24%; O 10.79%
Boiling Point: Bp₃ 172-173°
Sigma: V1381
Supelco: R47-4375

>>Variant: (*Z*)-form
Synonym(s): Asclepic acid

CAS Registry Number: 506-17-2

Molecular Formula: C₁₈H₃₄O₂
Molecular Weight: 282.465
Accurate Mass: 282.25588
Percentage Composition: C 76.54%; H 12.13%; O 11.33%
Biological Source: A minor component of various natural fats
Physical Description: Cryst. (Me₂CO)
Melting Point: Mp 14.5-15.5°
Aldrich: 28746-6
Sigma: V1006

>>Derivative: Me ester

CAS Registry Number: 1937-63-9
Boiling Point: Bp_{0.1} 162-164°
Refractive Index: n_D²⁰ 1.4500
Aldrich: 28741-5
Sigma: V5751
Supelco: R47-4370

References: