



Molecular Weight: 560.899
Accurate Mass: 560.48046
Percentage Composition: C 77.09%; H 11.50%; O 11.41%
Melting Point: Mp 38-40°
Optical Rotation: $[\alpha]_{\text{D}}^{23} +1.2$ (c, 0.85 in CHCl_3)

>>Variant: (R,Z)-form

Synonym(s): Ricinoleic acid. 12-Hydroxyoleic acid. Ricinusoleic acid. Ricinic acid. Ricinolic acid

CAS Registry Number: 141-22-0

Molecular Formula: $\text{C}_{18}\text{H}_{34}\text{O}_3$
Molecular Weight: 298.465
Accurate Mass: 298.250795
Percentage Composition: C 72.44%; H 11.48%; O 16.08%
Biological Source: Occurs in castor oil and other oils eg. grape, *Lesquerella densipila* and ergot (*Claviceps purpurea*)
Use/Importance: Used in polymer manuf., textile finishing and vaginal jellies
Physical Description: Viscous liq.
Melting Point: Mp 5.5°
Boiling Point: Bp_{10} 245°
Optical Rotation: $[\alpha]_{\text{D}}^{22} +6.67$ (c, 5 in Me_2CO). $[\alpha]_{\text{D}}^{26} +7.15$ (c, 5 in Me_2CO)
Solubility: Insol. H_2O ; sol. most org. solvs.
Refractive Index: n_{D}^{20} 1.4697

Fluka: 83903

Rare Chemicals Library: S55937-7

Sigma: R8625

>>Derivative: Me ester

CAS Registry Number: 141-24-2

Boiling Point: Bp_{15} 225-227°

Optical Rotation: $[\alpha]_{400} +14.9$

Sigma: R7018

>>Derivative: Et ester

CAS Registry Number: 55066-53-0

Boiling Point: Bp_{13} 258°

Optical Rotation: $[\alpha]_{\text{D}}^{22} +5.28$

Sigma: R2126

>>Derivative: Butyl ester

CAS Registry Number: 151-13-3

Molecular Formula: $\text{C}_{22}\text{H}_{42}\text{O}_3$

Molecular Weight: 354.572

Accurate Mass: 354.313395

Percentage Composition: C 74.52%; H 11.94%; O 13.54%

Boiling Point: Bp_{13} 278°

Density: d^{22} 0.91

Refractive Index: n_{D}^{23} 1.4566

>>Derivative: 12-Hydroxy-9-octadecenyl ester

Synonym(s): Ricinoleyl ricinoleate

CAS Registry Number: 36781-76-7

Molecular Formula: $\text{C}_{36}\text{H}_{68}\text{O}_4$

Molecular Weight: 564.931

Accurate Mass: 564.51176

Percentage Composition: C 76.54%; H 12.13%; O 11.33%

Other: PB R02020