



>>Entry Name: 2-Decenoic acid

ENTRY UNDER REVIEW

CAS Registry Number: 3913-85-7

$\text{H}_3\text{C}(\text{CH}_2)_6\text{CH}=\text{CHCOOH}$

Molecular Formula: $\text{C}_{10}\text{H}_{18}\text{O}_2$

Molecular Weight: 170.251

Accurate Mass: 170.13068

Percentage Composition: C 70.55%; H 10.66%; O 18.80%

>>Variant: (*E*)-form

CAS Registry Number: 334-49-6

Molecular Formula: $\text{C}_{10}\text{H}_{18}\text{O}_2$

Molecular Weight: 170.251

Accurate Mass: 170.13068

Percentage Composition: C 70.55%; H 10.66%; O 18.80%

Biological Source: Constit. of essential oil of *Achasma walang*. Also occurs in pear capsicum, mutton pork and black tea

Use/Importance: Mosquito (*Aedes aegypti*) repellent. Comly. available flavour ingredient

Physical Description: Liq. or solid with fresh, sweet fruity-fatty odour

Melting Point: Mp 12°

Boiling Point: Bp₁₅ 165°. Bp_{4.5} 148-149°

>>Derivative: Chloride

CAS Registry Number: 110232-46-7

Molecular Formula: $\text{C}_{10}\text{H}_{17}\text{ClO}$

Molecular Weight: 188.696

Accurate Mass: 188.096792

Percentage Composition: C 63.65%; H 9.08%; Cl 18.79%; O 8.48%

Boiling Point: Bp₁₄ 120-122°. Bp_{2.5} 95-97°

>>Derivative: Amide

Molecular Formula: $\text{C}_{10}\text{H}_{19}\text{NO}$

Molecular Weight: 169.266

Accurate Mass: 169.146664

Percentage Composition: C 70.96%; H 11.31%; N 8.27%; O 9.45%

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 121-122°

>>Derivative: 2-Methylpropylamide (*E*-)

Synonym(s): N-(2-Methylpropyl)-2-decenamide. 2-Decenoic acid isobutylamide

CAS Registry Number: 73785-32-7

Molecular Formula: $\text{C}_{14}\text{H}_{27}\text{NO}$

Molecular Weight: 225.373

Accurate Mass: 225.209264

Percentage Composition: C 74.61%; H 12.07%; N 6.21%; O 7.10%

Biological Source: Trace constit. of *Cissampelos glaberrima* roots

Physical Description: Solid (EtOAc)

Other Data: Unstable at r.t. Struct. based on ms data only

>>Derivative: Me ester

CAS Registry Number: 7367-85-3

Molecular Formula: $\text{C}_{11}\text{H}_{20}\text{O}_2$

Molecular Weight: 184.278

Accurate Mass: 184.14633

Percentage Composition: C 71.70%; H 10.94%; O 17.36%

Physical Description: Liq.

Boiling Point: Bp₁₅ 130-132°