



>>Entry Name: 2-Nonenoic acid, 9CI, 8CI

ENTRY UNDER REVIEW

Synonym(s): 2-Nonylenic acid

CAS Registry Number: 3760-11-0

Related CAS Registry Numbers(s): 764-86-3 17463-01-3

$\text{H}_3\text{C}(\text{CH}_2)_5\text{CH}=\text{CHCOOH}$

Molecular Formula: $\text{C}_9\text{H}_{16}\text{O}_2$

Molecular Weight: 156.224

Accurate Mass: 156.11503

Percentage Composition: C 69.19%; H 10.32%; O 20.48%

Biological Source: Occurs in mushrooms, tobacco volatiles etc.

Use/Importance: Used in mosquito repellents, and as a fungicide. Me ester used in perfumery and flavourings

Physical Description: Liq.

Melting Point: Fp 0.3°

Boiling Point: Bp₂₀ 173°

Solubility: Spar. sol. H_2O

Other Data: Steam-volatile

Rare Chemicals Library: S35401-5

>>Variant: (E)-form

CAS Registry Number: 14812-03-4

Molecular Formula: $\text{C}_9\text{H}_{16}\text{O}_2$

Molecular Weight: 156.224

Accurate Mass: 156.11503

Percentage Composition: C 69.19%; H 10.32%; O 20.48%

Biological Source: Isol. from tobacco and Scotch spearmint oil (*Mentha gracilis*)

Use/Importance: Acts as a pheromone in the honeybee

Physical Description: Liq.

Melting Point: Mp $1-2^\circ$ (4°)

Boiling Point: Bp₁₄ 146°

>>Derivative: Me ester

Synonym(s): Methyl 2-nonenoate. Neofolione. FEMA 2725

CAS Registry Number: 111-79-5

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%

Use/Importance: Flavouring ingredient

Physical Description: Liq. with violet-like odour

Boiling Point: Bp₅ 80°

Solubility: Insol. H_2O

Density: d₂₅²⁵ 0.895

Aldrich: W27250-7

Rare Chemicals Library: S36367-7

>>Derivative: Et ester

CAS Registry Number: 38112-59-3

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%

Use/Importance: Food preservative (prob. as isomeric mixt. with Z-form)

Physical Description: Liq.

Boiling Point: Bp₂₀ 114°

Solubility: Sol. Et_2O , THF, hexane