



>>Entry Name: Nonanal, 9CI

ENTRY UNDER REVIEW

Synonym(s): Nonyl aldehyde. Pelargonaldehyde. FEMA 2782

CAS Registry Number: 124-19-6

$\text{H}_3\text{C}(\text{CH}_2)_7\text{CHO}$

Molecular Formula: $\text{C}_9\text{H}_{18}\text{O}$

Molecular Weight: 142.241

Accurate Mass: 142.135765

Percentage Composition: C 76.00%; H 12.75%; O 11.25%

Biological Source: Found in various plant sources incl. fresh fruits, citrus peels, cassava (*Manihot esculenta*), rice (*Oryza sativa*), and *Cannabis sativa*. Also found in wood ant secretions

Use/Importance: Acts as an insect pheromone and may also be a pheromone in humans. Perfumery ingredient. Flavouring ingredient

Physical Description: Liq. with sharp, pleasant odour

Boiling Point: Bp 190-192°. Bp₂₂ 91-92°

Density: d_4^{20} 0.8264

Refractive Index: n_D^{20} 1.4240

Other Data: Polymerises readily with H_2SO_4 . Oxidised fairly rapidly in air

Hazard & Toxicity: Skin irritant

Aldrich: N3080-3

Fluka: 76310

Supelco: R42-1830

>>Derivative: Trimer

Synonym(s): 2,4,6-Trioctyl-1,3,5-trioxane

CAS Registry Number: 50876-89-6

Molecular Formula: $\text{C}_{27}\text{H}_{54}\text{O}_3$

Molecular Weight: 426.722

Accurate Mass: 426.407295

Percentage Composition: C 76.00%; H 12.75%; O 11.25%

Physical Description: Solid

Melting Point: Mp 33.5°

>>Derivative: Oxime

CAS Registry Number: 2243-24-5

Molecular Formula: $\text{C}_9\text{H}_{19}\text{NO}$

Molecular Weight: 157.255

Accurate Mass: 157.146664

Percentage Composition: C 68.74%; H 12.18%; N 8.91%; O 10.17%

Physical Description: Leaflets (EtOH aq.)

Melting Point: Mp 64°

Other Data: Steam-volatile

>>Derivative: Semicarbazone

CAS Registry Number: 16742-11-3

Melting Point: Mp 100°

>>Derivative: 2,4-Dinitrophenylhydrazone

CAS Registry Number: 2348-19-8

Physical Description: Golden-yellow needles (EtOH)

Melting Point: Mp 106-107° (100°)

>>Derivative: Di-Me acetal

Synonym(s): 1,1-Dimethoxynonane, 9CI