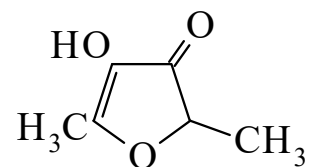




>>Entry Name: 4-Hydroxy-2,5-dimethyl-3(2H)-furanone, 9CI

ENTRY UNDER REVIEW

Synonym(s): Furaneol. Alletone. Pineapple ketone. COE 536. FEMA 3174



CAS Registry Number: 3658-77-3

Related CAS Registry Numbers(s): 131222-81-6 131222-82-7

Molecular Formula: C₆H₈O₃

Molecular Weight: 128.127

Accurate Mass: 128.047345

Percentage Composition: C 56.25%; H 6.29%; O 37.46%

Biological Source: Volatile flavour and aroma component of many foods and food products e.g. pineapple, mango, strawberry, cooked beef, roasted nuts, popcorn, shoyu, malt, etc.. Also found in male *Eurycotis floridana*

Use/Importance: Insect sex pheromone. Flavouring ingredient

Aldrich: 32248-2

>>Variant: (±)-form

Molecular Formula: C₆H₈O₃

Molecular Weight: 128.127

Accurate Mass: 128.047345

Percentage Composition: C 56.25%; H 6.29%; O 37.46%

Physical Description: Cryst. (petrol) with fruity-caramel or burnt-pineapple odour

Melting Point: Mp 77-78°

Boiling Point: Subl.₁ 85° (bath)

>>Derivative: 4-O-β-D-Glucopyranoside

CAS Registry Number: 121063-56-7

Molecular Formula: C₁₂H₁₈O₈

Molecular Weight: 290.269

Accurate Mass: 290.10017

Percentage Composition: C 49.65%; H 6.25%; O 44.10%

Biological Source: Constit. of strawberry juice

Physical Description: Oil

Optical Rotation: [α]_D²⁰ -50

>>Derivative: 4-O-(6-O-Malonyl-β-D-glucopyranoside)

Molecular Formula: C₁₅H₂₀O₁₁

Molecular Weight: 376.316

Accurate Mass: 376.100565

Percentage Composition: C 47.88%; H 5.36%; O 46.77%

Biological Source: Constit. of strawberries

UV: [neutral] λ_{max} 275 () (no solvent reported)