



Molecular Formula: C₁₈H₃₄O₁₁

Molecular Weight: 426.46

Accurate Mass: 426.210115

Percentage Composition: C 50.70%; H 8.04%; O 41.27%

Biological Source: Constit. of *Codonopsis tangshen*

Physical Description: Powder

Optical Rotation: [α]_D²³ -23.3 (c, 0.5 in H₂O)

>> **Derivative:** O-[α -L-Arabinofuranosyl-(1→6)- β -D-glucopyranoside]

CAS Registry Number: 124044-06-0

Molecular Formula: C₁₇H₃₂O₁₀

Molecular Weight: 396.434

Accurate Mass: 396.19955

Percentage Composition: C 51.51%; H 8.14%; O 40.36%

Biological Source: Constit. of apples (*Malus sylvestris*)

>> **Derivative:** O-[β -D-Apiofuranosyl-(1→6)- β -D-glucopyranoside]

Synonym(s): Icariside G₁

CAS Registry Number: 117596-86-8

Molecular Formula: C₁₇H₃₂O₁₀

Molecular Weight: 396.434

Accurate Mass: 396.19955

Percentage Composition: C 51.51%; H 8.14%; O 40.36%

Source/Synthesis: Constit. of *Epimedium grandiflorum* var. *thunbergianum*

Physical Description: Visc. oil

Optical Rotation: [α]_D²¹ -95.1 (c, 0.72 in MeOH)

>> **Derivative:** Formyl

Synonym(s): Hexyl formate. FEMA 2570

CAS Registry Number: 629-33-4

Molecular Formula: C₇H₁₄O₂

Molecular Weight: 130.186

Accurate Mass: 130.09938

Percentage Composition: C 64.58%; H 10.84%; O 24.58%

Biological Source: Volatile component of many fruits

Use/Importance: Present in fruits e.g. apple, grape, peach, strawberry, black tea, licorice and other foods. Flavouring ingredient

Physical Description: Oil with fruity apple/unripe plum odour and sweet taste

Boiling Point: Bp 155-156° (176.7°)

Density: d₄²⁰ 0.88

Refractive Index: n_D²⁰ 1.4051

>> **Derivative:** Ac

Synonym(s): Hexyl acetate. Acetate C6. FEMA 2565

CAS Registry Number: 142-92-7

Molecular Formula: C₈H₁₆O₂

Molecular Weight: 144.213

Accurate Mass: 144.11503

Percentage Composition: C 66.63%; H 11.18%; O 22.19%

Biological Source: Present in fruits

Use/Importance: Used in fruit aroma concentrates and perfumery

Physical Description: Oil with fruity odour and bittersweet taste

Melting Point: Fp -81°

Boiling Point: Bp 169.2°

Density: d₄²⁰ 0.87