



CAS Registry Number: 774-65-2

Molecular Formula: C₁₁H₁₄O₂

Molecular Weight: 178.23

Accurate Mass: 178.09938

Percentage Composition: C 74.13%; H 7.92%; O 17.95%

Boiling Point: Bp₂ 96°

>>Derivative: Benzyl ester

Synonym(s): Benzyl benzoate, USAN. Ascabin. Benylate. Vanzoate. FEMA 2138. Many other names

CAS Registry Number: 120-51-4

Molecular Formula: C₁₄H₁₂O₂

Molecular Weight: 212.248

Accurate Mass: 212.08373

Percentage Composition: C 79.23%; H 5.70%; O 15.08%

Biological Source: Contained in Peru balsam and Tolu balsam. Isol. from other plants e.g. *Jasminum* spp., ylang-ylang oil

Use/Importance: Acaricide and pediculicide agent. Insect repellent component. Used in perfumery as fixative and in food flavouring, pharmaceutical excipient (solubilising agent, solvent)

Physical Description: Leaflets with balsamic/almond flavour and sharp, pungent flavour

Melting Point: Mp 21° (19.5°)

Boiling Point: Bp 323-324° (316-317°). Bp_{0.1} 80-82°

Density: d¹⁸ 1.11

Calculated Log P Data: Log P 3.88 (uncertain value) (calc)

Other Data: Spar. steam-volatile

Hazard & Toxicity: Fl. p. 148°, autoignition temp. 480°. Eye, mucous membrane, and possible skin irritant. Hypersensitivity reactions reported. LD₅₀ (rat, orl) 500 mg/kg

Aldrich: W21380-2

Fluka: 12390

Sigma: B6630

>>Derivative: Ph ester

see Phenyl benzoate, [MTL19-R](#)

>>Derivative: α-L-Rhamnopyranosyl ester

Synonym(s): Benzoyl α-L-rhamnopyranoside

Molecular Formula: C₁₃H₁₆O₆

Molecular Weight: 268.266

Accurate Mass: 268.09469

Percentage Composition: C 58.20%; H 6.01%; O 35.78%

Biological Source: Prod. by *Streptomyces griseoviridis*

Melting Point: Mp 145 dec.°

Optical Rotation: [α]_D²⁰ -52 (c, 0.35 in MeOH)

UV: [neutral] λ_{max} 201 (log ε 4.02); 209 (log ε 3.51); 230 (log ε 4.11); 258 (log ε 2.83); 274 (log ε 2.98) (MeOH)

>>Derivative: Fluoride

Synonym(s): Benzoyl fluoride

CAS Registry Number: 455-32-3

Molecular Formula: C₇H₅FO

Molecular Weight: 124.114

Accurate Mass: 124.032443

Percentage Composition: C 67.74%; H 4.06%; F 15.31%; O 12.89%

Physical Description: Fuming liq.

Boiling Point: Bp 159-161°

Other Data: Hydrolysed by hot H₂O

Hazard & Toxicity: Highly irritant, causes burns, violent reaction with DMSO. Fl. p. 72/102°

Aldrich: 14074-0