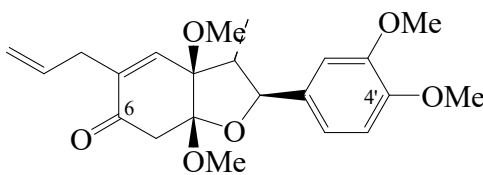




>>Entry Name: Piperenone

Synonym(s): 2-(3,4-Dimethoxyphenyl)-3,3*a*,7,7*a*-tetrahydro-3*a*,7*a*-dimethoxy-3-methyl-5-(2-propenyl)-6(2*H*)-benzofuranone, 9CI



CAS Registry Number: 57625-31-7

Related CAS Registry Numbers(s): 61307-69-5 128397-58-0 128515-14-0

Molecular Formula: C₂₂H₂₈O₆

Molecular Weight: 388.46

Accurate Mass: 388.18859

Percentage Composition: C 68.02%; H 7.26%; O 24.71%

Biological Source: Isol. from *Piper futokadsura*

Use/Importance: Antifeedant

Melting Point: Mp 86-88°

Optical Rotation: [α]_D -129 (c, 1.16 in MeOH)

UV: [neutral] $\lambda_{\max}$ 231 (); 280 (); 285 () (MeOH)

>>Derivative: 4'-O-De-Me

Synonym(s): Liliflone

CAS Registry Number: 87402-80-0

Molecular Formula: C₂₁H₂₆O₆

Molecular Weight: 374.433

Accurate Mass: 374.17294

Percentage Composition: C 67.36%; H 7.00%; O 25.64%

Biological Source: Constit. of *Magnolia liliflora*

Physical Description: Viscous oil

>>Derivative: 6 α -Alcohol

Synonym(s): 2-(3,4-Dimethoxyphenyl)-2,3,3*a*,6,7,7*a*-hexahydro-3*a*,7*a*-dimethoxy-3-methyl-5-(2-propenyl)-6-benzofuranol, 9CI

CAS Registry Number: 61307-70-8

Molecular Formula: C₂₂H₃₀O₆

Molecular Weight: 390.475

Accurate Mass: 390.20424

Percentage Composition: C 67.67%; H 7.74%; O 24.58%

Biological Source: Constit. of *Piper wightii*

Melting Point: Mp 72.5-73.5° (semisynthetic)

Optical Rotation: [α]_D²² -228 (c, 0.3 in MeOH)

References:

- Matsui, K. *et al.*, *Agric. Biol. Chem.*, 1976, **40**, 1113-1118, (*isol, struct, ms, uv, pmr, synth*)
Matsui, K. *et al.*, *Bull. Chem. Soc. Jpn.*, 1976, **49**, 62, (*cryst struct*)
Iida, T. *et al.*, *Phytochemistry*, 1983, **22**, 763, (*Liliflone*)
Tyagi, O.D. *et al.*, *Acta Chem. Scand.*, 1994, **48**, 1007-1011, (*6-alcohol, isol, pmr, cmr, ms*)
Koul, J.L. *et al.*, *Phytochemistry*, 1996, **41**, 1097, (*isol, uv, ir, pmr, cmr*)