



>>Entry Name: [8]-Gingerol

Synonym(s): 5-Hydroxy-1-(4-hydroxy-3-methoxyphenyl)-3-dodecanone, 9Cl

CAS Registry Number: 107257-17-0

As [6]-Gingerol, [HCV46-D](#) with
n = 6

Molecular Formula: C₁₉H₃₀O₄

Molecular Weight: 322.444

Accurate Mass: 322.21441

Percentage Composition: C 70.77%; H 9.38%; O 19.85%

>>Variant: (R)-form

CAS Registry Number: 135272-33-2

Molecular Formula: C₁₉H₃₀O₄

Molecular Weight: 322.444

Accurate Mass: 322.21441

Percentage Composition: C 70.77%; H 9.38%; O 19.85%

Melting Point: Mp 35°

Optical Rotation: $[\alpha]_D^{25} -25.9$ (c, 0.5 in CHCl₃)

>>Variant: (S)-form

CAS Registry Number: 23513-08-8

Molecular Formula: C₁₉H₃₀O₄

Molecular Weight: 322.444

Accurate Mass: 322.21441

Percentage Composition: C 70.77%; H 9.38%; O 19.85%

Biological Source: Constit. of ginger, the rhizome of *Zingiber officinale*

Biological Use/Importance: Exhibits cardiotonic activity

Melting Point: Mp 29-30°

Optical Rotation: $[\alpha]_D +26$ (c, 0.9 in CHCl₃)

>>Variant: (±)-form

CAS Registry Number: 77398-92-6

Molecular Formula: C₁₉H₃₀O₄

Molecular Weight: 322.444

Accurate Mass: 322.21441

Percentage Composition: C 70.77%; H 9.38%; O 19.85%

Melting Point: Mp 32-34°

References:

- Cornell, D.W. *et al.*, *Aust. J. Chem.*, 1969, **22**, 1033-1043, (*isol, struct*)
Shogi, N. *et al.*, *J. Pharm. Sci.*, 1982, **71**, 1174-1175, (*isol, uv, pmr, cmr*)
Kato, N. *et al.*, *Chem. Pharm. Bull.*, 1984, **32**, 1679-1682, (*synth*)
Martin, M. *et al.*, *Chirality*, 1991, **3**, 151-155, (*enantiomers, synth, ir, pmr*)
Solladie, G. *et al.*, *J.O.C.*, 1993, **58**, 2181-2185, (*synth, pmr, cmr*)
Fleming, S.A. *et al.*, *Synth. Commun.*, 1999, **29**, 1933-1939, (*synth, pmr, cmr*)