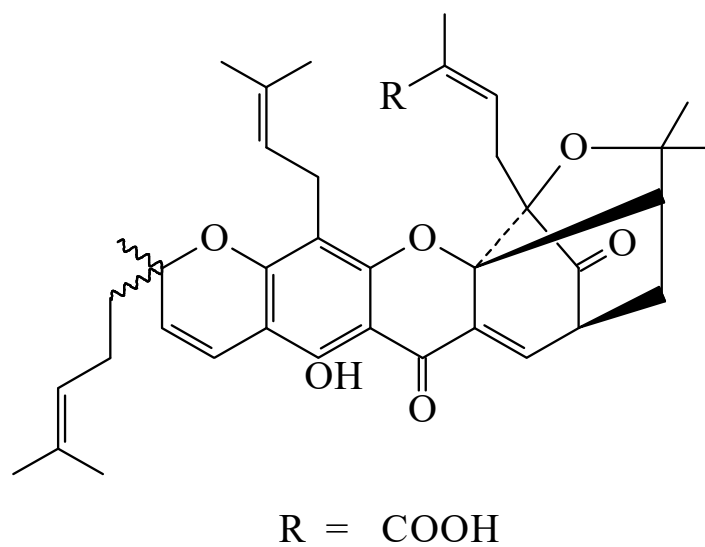




>>Entry Name: Gambogic acid

Synonym(s): Guttic acid. Guttatic acid. β -Guttilactone. α -Gambogic acid. β -Guttiferin



CAS Registry Number: 2752-65-0

Molecular Formula: $C_{38}H_{44}O_8$

Molecular Weight: 628.761

Accurate Mass: 628.30362

Percentage Composition: C 72.59%; H 7.05%; O 20.36%

General Statement: The name Guttic (Guttatic) acid is a transliteration of the French/Italian names for the substance. The English equiv. is stated to be Gambogic acid. Gamboge is also known as Gummi Gutta

Biological Source: Isol. from Gamboge resin (exudate of *Garcinia morella*) and from *Garcinia hanburyi*

Use/Importance: Inhibits HeLa cells *in vitro*

Physical Description: Cryst. or amorph. mass

Melting Point: Mp 86-91°

Optical Rotation: $[\alpha]_D^{24}$ -698 (CHCl₃)

Other Data: Closely related to Morellin [CNJ05-E](#)

Hazard & Toxicity: LD₅₀ (rat, ipr) 88 mg/kg

>>Derivative: Py salt

Physical Description: Golden-yellow needles

Melting Point: Mp 138°. Mp 150-151° (dimorph.)

Optical Rotation: $[\alpha]_D$ -550 (c, 1.0 in CHCl₃)

>>Derivative: (E)-Isomer

Synonym(s): Isogambogic acid

CAS Registry Number: 149655-52-7

Molecular Formula: $C_{38}H_{44}O_8$

Molecular Weight: 628.761

Accurate Mass: 628.30362

Percentage Composition: C 72.59%; H 7.05%; O 20.36%

Biological Source: Isol. from *Garcinia hanburyi*

Optical Rotation: $[\alpha]_D^{20}$ -408 (c, 0.1 in CHCl₃)

References:

Amorosa, M. *et al.*, *Ann. Chim. (Rome)*, 1966, **56**, 232

Ahmad, A.S. *et al.*, *J.C.S.(C)*, 1966, 772, (struct)

Arnone, A. *et al.*, *Tet. Lett.*, 1967, 4201, (pmr, struct)

Lin, L.-J. *et al.*, *Magn. Reson. Chem.*, 1993, **31**, 340, (Isogambogic acid)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, CBA125