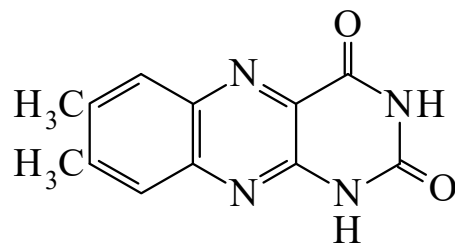




>>Entry Name: 7,8-Dimethylbenzo[g]pteridine-2,4(1H,3H)-dione, 9Cl

Synonym(s): Lumichrome. 7,8-Dimethylalloxazine



CAS Registry Number: 1086-80-2

Type of Compound Code(s): VX7350

Molecular Formula: C₁₂H₁₀N₄O₂

Molecular Weight: 242.237

Accurate Mass: 242.080376

Percentage Composition: C 59.50%; H 4.16%; N 23.13%; O 13.21%

Biological Source: Irradiation product of Riboflavine [HDV43-H](#)

Physical Description: Pale-yellow cryst. (CHCl₃ or AcOH aq.)

Melting Point: Mp 300° (dec.). Mp 300°

Solubility: Spar. sol. H₂O, EtOH, CHCl₃

Other Data: Blue fluor. in soln.

Aldrich: 10321-7

Sigma: L7507

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 894D, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **2**, 768B, (*nmr*)

Sigma-Aldrich Library of Stains, Dyes and Indicators, 430

Karrer, P. *et al.*, *Helv. Chim. Acta*, 1934, **17**, 1010, (*isol*)

Seng, F. *et al.*, *Angew. Chem., Int. Ed.*, 1972, **11**, 1010, (*synth*)

Yoneda, F. *et al.*, *J.A.C.S.*, 1976, **98**, 830, (*synth*)

Villemin, D. *et al.*, *Synth. Commun.*, 1995, **25**, 2319, (*synth, ms*)