



>>Entry Name: 4,7-Dimethyl-2*H*-1-benzopyran-2-one, 9CI

Synonym(s): 4,7-Dimethylcoumarin, 8CI

CAS Registry Number: 14002-90-5

Structure by analogy with 3,4-Dimethyl-2*H*-1-benzopyran-2-one, [JNG52-A](#)

Molecular Formula: C₁₁H₁₀O₂

Molecular Weight: 174.199

Accurate Mass: 174.06808

Percentage Composition: C 75.84%; H 5.79%; O 18.37%

Physical Description: Needles (EtOH aq.)

Melting Point: Mp 132°

>>Derivative: Oxime

Molecular Formula: C₁₁H₁₁NO₂

Molecular Weight: 189.213

Accurate Mass: 189.078979

Percentage Composition: C 69.83%; H 5.86%; N 7.40%; O 16.91%

Physical Description: Needles (EtOH aq.)

Melting Point: Mp 179°

>>Derivative: Phenylhydrazone

Physical Description: Gold-brown needles

Melting Point: Mp 99-100°

References:

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Fries, K. *et al.*, *Annalen*, 1911, **379**, 90, (*synth*)

Wittig, G., *Annalen*, 1926, **446**, 155, (*synth*)

Robertson, A. *et al.*, *J.C.S.*, 1932, 1681, (*synth*)

Lacey, R.N., *J.C.S.*, 1954, 854, (*synth*)

Ganguly, B.K. *et al.*, *J.O.C.*, 1956, **21**, 1415, (*uv*)

Osborne, A.G., *Tetrahedron*, 1981, **37**, 2021, (*synth*, *cmr*, *pmr*)