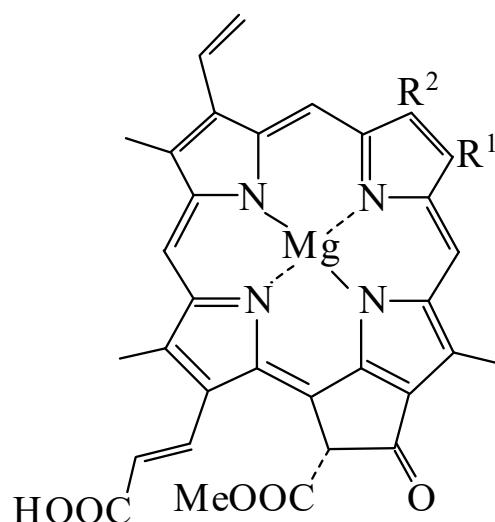




>>Entry Name: Chlorophyll c

ENTRY UNDER REVIEW

Synonym(s): Chlorophyllide c



$c_1, R^1 = \text{CH}=\text{CH}_2, R^2 = \text{CH}_3$

$c_2, R^1 = \text{CH}_2\text{CH}_3, R^2 = \text{CH}_3$

$c_3, R^1 = \text{CH}=\text{CH}_2, R^2 = \text{COOMe}$

Related CAS Registry Numbers(s): 1406-65-1

General Statement: In spite of their name these are porphyrins, not dihydro derivs. (or chlorins)

Biological Source: Widely distributed photosynthetic pigment in marine organisms, e.g. the diatom *Nitzschia closterium*

Physical Description: Cryst. (THF/petrol)

Other Data: λ_{max} 447, 578, 626 nm (Et₂O)

>>Variant: Chlorophyll c₁

CAS Registry Number: 18901-56-9

Molecular Formula: C₃₅H₂₈MgN₄O₅

Molecular Weight: 608.935

Accurate Mass: 608.191013

Percentage Composition: C 69.04%; H 4.63%; Mg 3.99%; N 9.20%; O 13.14%

>>Variant: Chlorophyll c₂

CAS Registry Number: 27736-03-4

Molecular Formula: C₃₅H₃₀MgN₄O₅

Molecular Weight: 610.951

Accurate Mass: 610.206663

Percentage Composition: C 68.81%; H 4.95%; Mg 3.98%; N 9.17%; O 13.09%

>>Variant: Chlorophyll c₃

CAS Registry Number: 111308-93-1

Molecular Formula: C₃₆H₂₈MgN₄O₇

Molecular Weight: 652.945

Accurate Mass: 652.180843

Percentage Composition: C 66.22%; H 4.32%; Mg 3.72%; N 8.58%; O 17.15%

References:

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Clezy, P.S. *et al.*, *Aust. J. Chem.*, 1978, **31**, 2491, (*synth*)
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Leeper, F.J., *Nat. Prod. Rep.*, 1985, **2**, 19; 561; 1987, **4**, 441; 1989, **6**, 171, (*revs, biosynth*)
Tasumi, M. *et al.*, *Adv. Spectrosc. (Chichester, U.K.)*, 1987, **14**, 407, (*rev, ir, Raman*)
Fookes, C.J.R. *et al.*, *Chem. Comm.*, 1989, 1827, (*isol, pmr, struct, Chlorophyll c₃*)