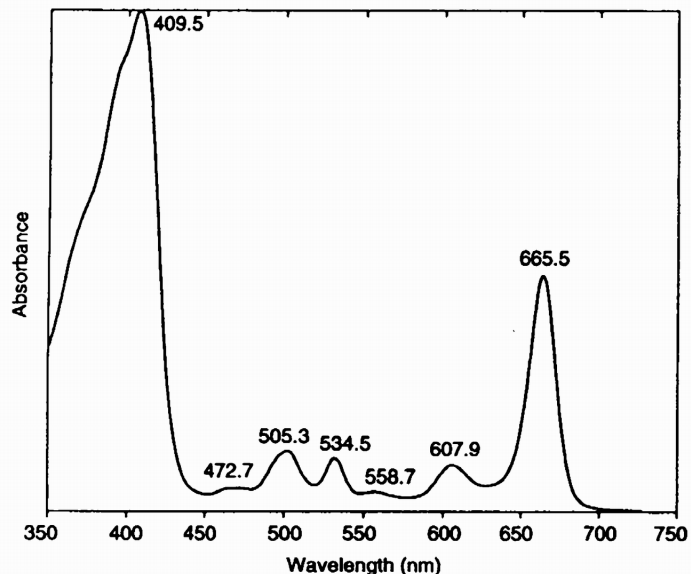


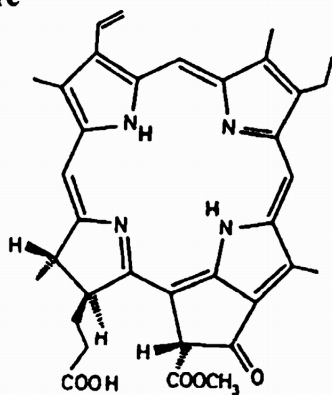
Pheophorbide *a*

HPLC peak 20

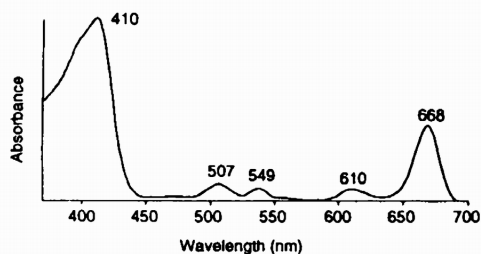
Standard spectrum in reference solvent: acetone (100%)



Molecular structure

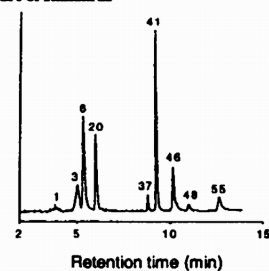


Diode array spectrum in SCOR eluant



HPLC*: Pheophorbide *a*, peak 20

Mixture of standards



* Mantoura and Llewellyn (1983) system

Pheophorbide *a*

Property

Data

Name:	(Trivial) (IUPAC)	Pheophorbide <i>a</i> Trivial name sufficient; see Hynninen (1991)
SCOR abbreviation:		Phide <i>a</i>
Occurrence:		Marine detritus, zooplankton faecal pellets
Colour:		Grey (red fluorescence) on TLC; yellow-grey (concentrated solution)
Molecular formula:		C ₃₅ H ₃₆ N ₄ O ₅
Molecular weight:		592.67
Specific extinction coefficient: α (l g ⁻¹ cm ⁻¹)		74.2 (at 667 nm in 90% acetone) Lorenzen & Jeffrey (1980)
Molar extinction coefficient: ε (l mol ⁻¹ cm ⁻¹)		43.98 x 10 ³ (at 667 nm in 90% acetone) Calculated from α above
UV-vis spectra:		

Solvent	Absorbance maxima (nm)						Band ratio*	Reference
100% Acetone	409.5	505.3	534.5	558.7	607.9	665.5	2.16	SCOR WG 78 data
HPLC Eluant	410	507	549		610	668	2.35	SCOR WG 78: Wright <i>et al.</i> (1991) method

*Soret (blue maximum): red ratio

Solvent	Excitation (nm)	Emission (nm)	Reference
Acetone	406	672	SCOR WG 78 data

Alteration products: Epimers, allomers, pyro- and meso-derivatives

Origin: Acidification of chlorophyllide *a*

Additional reference(s): Scheer (1991)