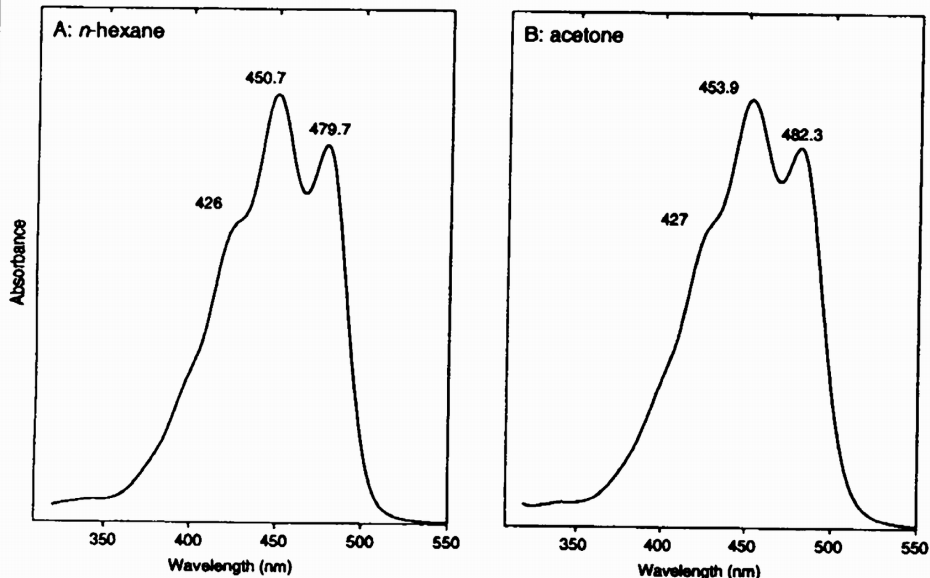


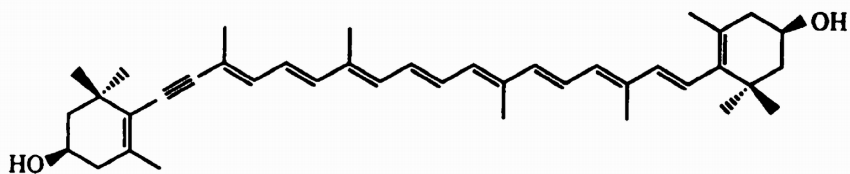
Diatoxanthin

HPLC peak 32

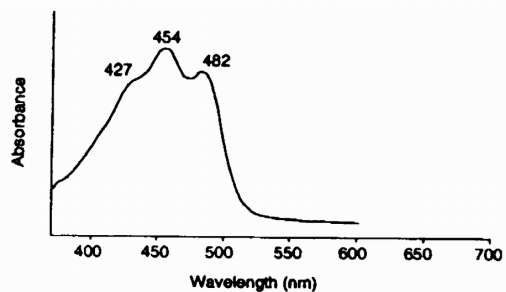
Standard spectrum in reference solvents



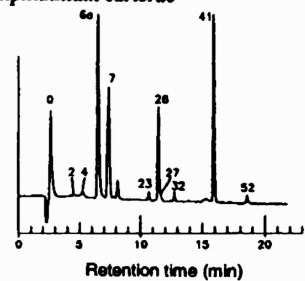
Molecular structure



Diode array spectrum in SCOR eluant



HPLC: Diatoxanthin, peak 32 *Amphidinium carterae*



Diatoxanthin

Property

Data

Name:	(Trivial) (IUPAC)	Diatoxanthin (3 <i>R</i> ,3' <i>R</i>)-7,8-Didehydro- β , β -carotene-3,3'-diol
SCOR abbreviation:		Diato
Occurrence:		Minor or trace pigment in diatoms, prymnesiophytes, some chrysophytes, dinoflagellates
Colour:		Pale orange
Molecular formula:		C ₄₀ H ₅₄ O ₂
Molecular weight:		566.87
Specific extinction coefficient:		2100 (at 452 nm in acetone) Not determined; recommended by Johansen <i>et al.</i> (1974)
Molar extinction coefficient:		119 x 10 ³ (at 452 nm in acetone) Calculated from E _{1 cm} ^{1%} above

UV-vis spectra:

Solvent	Maxima (nm)			Band ratio %III:II	Reference
	I	II	III		
Acetone	(427)	454	482	42	SCOR WG 78 data
Acetone	(434)	454	482	35	Bjørmland (1982)
Acetone	429	454	482		Berger <i>et al.</i> (1977)
Ethanol		451	480		Stauber & Jeffrey (1988)
Hexane	(426)	451	480	31	SCOR WG 78 data
HPLC Eluant	(427)	454	482	26	SCOR WG 78: Wright <i>et al.</i> (1991) method

Alteration products:

Cis-isomers

Culture from which SCOR data were obtained:

Amphidinium carterae (dinoflagellate)

Additional reference(s):

Stauber & Jeffrey (1988); Stransky & Hager (1970b)