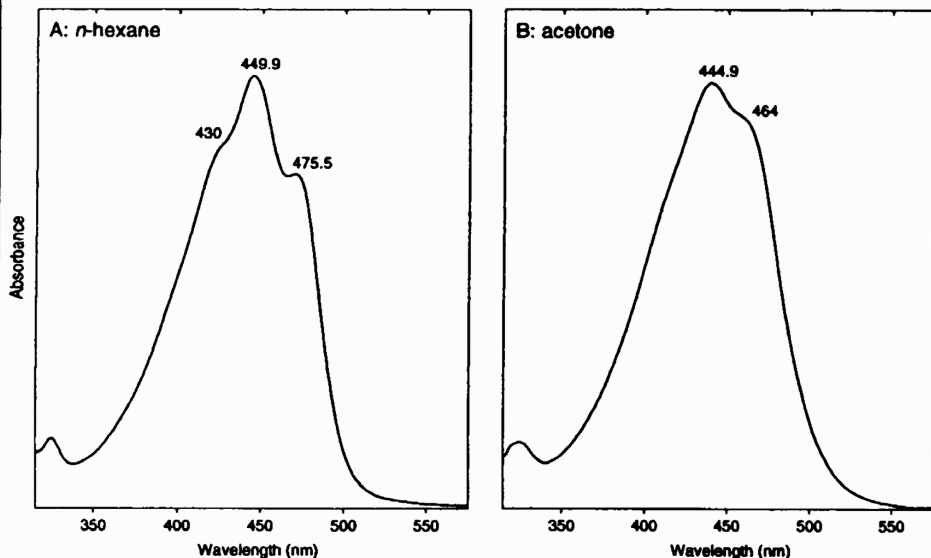


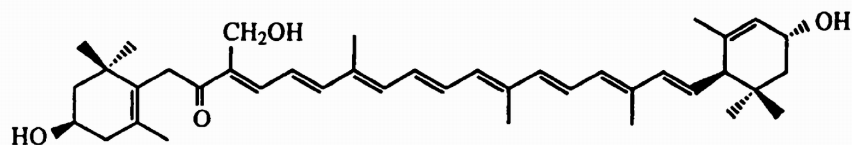
Siphonaxanthin

HPLC peak 8

Standard spectrum in reference solvents

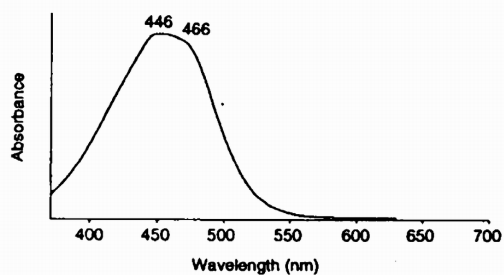


Molecular structure

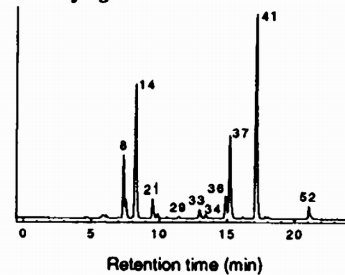


The chirality of siphonaxanthin is assumed to be identical to that of siphonein.

Diode array spectrum in SCOR eluant



HPLC: Siphonaxanthin, peak 8 *Codium fragile*



Siphonaxanthin

Property

Data

Name:	(Trivial) (IUPAC)	Siphonaxanthin 3,19,3'-Trihydroxy-7,8-dihydro- β , ϵ -caroten-8-one
SCOR abbreviation:		Siphx
Occurrence:		Major pigment in siphonous green seaweeds (e.g. <i>Caulerpa</i>), and <i>Ostreobium</i> . Suspected but not confirmed in some members of the Micromonadophyceae, Wright <i>et al.</i> (1991)
Colour:		Salmon pink
Molecular formula:		$C_{40}H_{56}O_4$
Molecular weight:		600.88
Specific extinction coefficient:		2500 (at 445 nm in acetone) $E_{1\text{ cm}}^{1\%}$ (100 ml g^{-1} cm^{-1}) Not determined; use $E_{1\text{ cm}}^{1\%}$ for β , β -carotene, Davies (1976)
Molar extinction coefficient:		150×10^3 (at 445 nm in acetone) ϵ ($l\text{ mol}^{-1}\text{ cm}^{-1}$) Calculated from $E_{1\text{ cm}}^{1\%}$ above

UV-vis spectra:

Solvent	Maxima (nm)			Band ratio %III:II	Reference
	I	II	III		
Acetone		445	(464)	0	SCOR WG 78 data
Ethanol		449			Jeffrey (1968b)
Ethanol		449			Yokohama <i>et al.</i> (1977)
<i>n</i> -Hexane	(430)	450	476	3	SCOR WG 78 data
HPLC Eluant		446	(466)		SCOR WG 78: Wright <i>et al.</i> (1991) method

Alteration products:

Cis-isomers

Origin:

Codium fragile fronds (siphonous green seaweed from a natural habitat)

Additional reference(s):

Jeffrey (1968b); Yokohama *et al.* (1977); Goodwin (1980); Anderson (1985); Fawley & Lee (1990)