

COUMARIN 498

Synonym: 2,3,6,7-tetrahydro-10-(methylsulfonyl)-1H,5H,11H-[1]benzopyrano[6,7,8-ij]quinolizin-11-one

Catalog No.: 04980

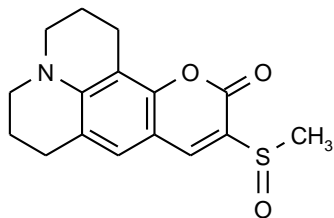
CAS No.: 87331-48-4

MW: 319.00

Chemical Formula: C₁₆H₁₇NO₄S

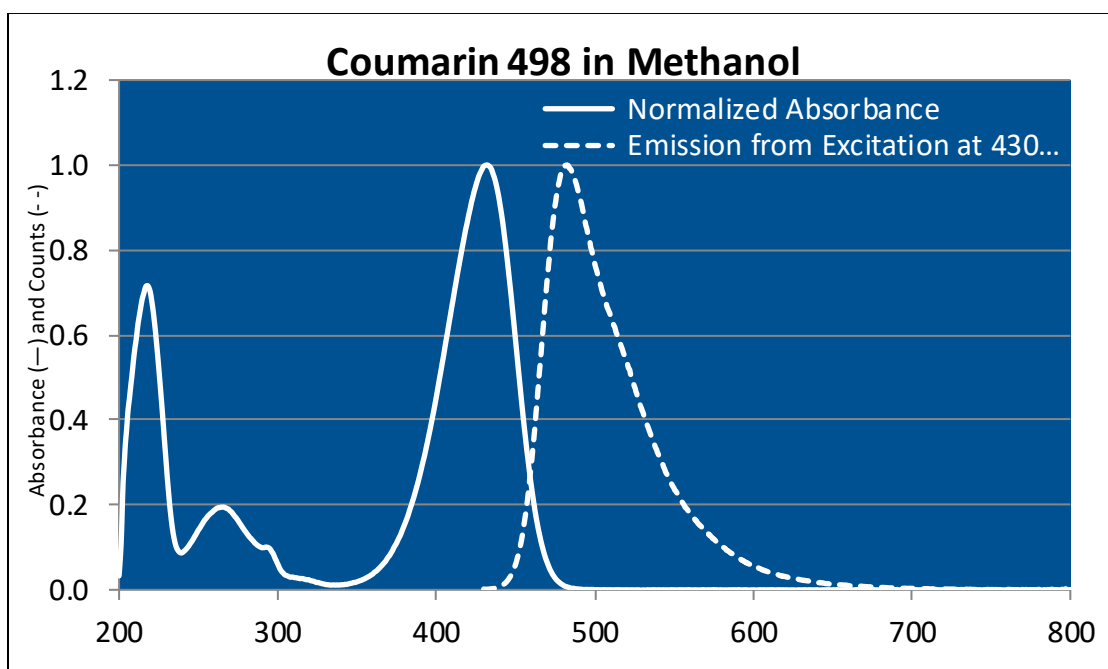
Appearance: Orange crystals

Structure:



Max. Lasing Wavelength (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
490	476-540	FL ⁶⁹	Methanol	8 x 10 ⁻⁵	430 ^e	480 ^e
500	492-508	FL(triaxial) ¹⁵⁷	Ethanol			
514	505-524	FL(triaxial) ¹⁵⁷	EtOH/H ₂ O, 1/1			
496	485-525	XeCl(308) ¹⁵⁸	Methanol	5.2 x 10 ⁻³		
503	488-527	Ar(458 or 476,bb) ⁶⁸	BzOH/EG, 1/4	1.1 x 10 ⁻²		
506	490-538	Ar(458 or 476,SF) ⁶⁸	BzOH/EG, 1/4	1.1 x 10 ⁻²		

EtOH/H₂O=ethanol/water, BzOH=benzyl alcohol, EG=ethylene glycol, e=ethanol



The information presented above is believed to be accurate but is not a specification. The customer is fully responsible for determining the suitability of this product for use in their application. Exciton, Inc. does not represent that the information is sufficient or complete for any specific application.

Quantum Yields and Lifetimes

Absorbance (nm)	Emission (nm)	Quantum Yield (max = 1.0)	Solvent	Lifetime (ns)	References, Notes
430	480	0.82	Ethanol		C-6a
		0.77	Ethanol		C-6b
442	488	0.87	Ethanol/Water (50:50)		C-6a
		0.87	Ethanol/Water (50:50)		C-6b

REFERENCES:

68. Coherent Inc., 3210 Porter Dr., Palo Alto, CA 94304
69. Candela Laser Corporation, 530 Boston Post Road, Wayland, MA 01778-1833
157. Lasing and Fluorescent Characteristics of Nine, New, Flashlamp-Pumpable, Coumarin Dyes in Ethanol:Water, A.N. Fletcher, D.E. Bliss and J.M. Kauffman, *Optics Commun.*, 47(1), 57 (1983)
158. Lasing Characteristics of the New Dyes in Methanol, W. Young, Lumonics, 105 Schneider Rd., Kanata (Ottawa), Ontario, Canada K2K 1Y3
- C-6a. Lasing and Fluorescent Characteristics of Nine, New, Flashlamp Pumpable, Coumarin Dyes in Ethanol and Ethanol:Water, A.N. Fletcher, D.E. Bliss, and J.M. Kauffman, *Optics Commun.*, 47(1), 57 (1983), [https://doi.org/10.1016/0030-4018\(83\)90336-X](https://doi.org/10.1016/0030-4018(83)90336-X) **Note A:** Under air
- C-6b. Lasing and Fluorescent Characteristics of Nine, New, Flashlamp Pumpable, Coumarin Dyes in Ethanol and Ethanol:Water, A.N. Fletcher, D.E. Bliss, and J.M. Kauffman, *Optics Commun.*, 47(1), 57 (1983), [https://doi.org/10.1016/0030-4018\(83\)90336-X](https://doi.org/10.1016/0030-4018(83)90336-X) **Note B:** Under argon

For a current list of biology, biological stain, or biochemistry references for Coumarin 498 from PubMed, click on the following link:
[Coumarin 498](#)