

Rhodamine 19 Perchlorate

Synonym: 2-[6-(ethylamino)-3-(ethylimino)-2,7-dimethyl-3H-xanthen-9-yl]-benzoic acid, perchlorate

Catalog No.: 05751

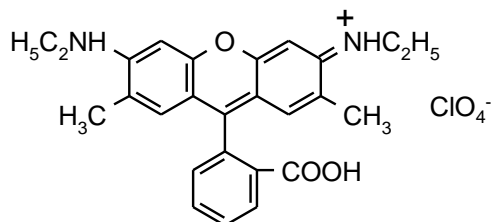
CAS No.: 62669-66-3

Chemical Formula: C₂₆H₂₇N₂O₃.ClO₄

MW: 514.96

Appearance: Red crystals

Structure:

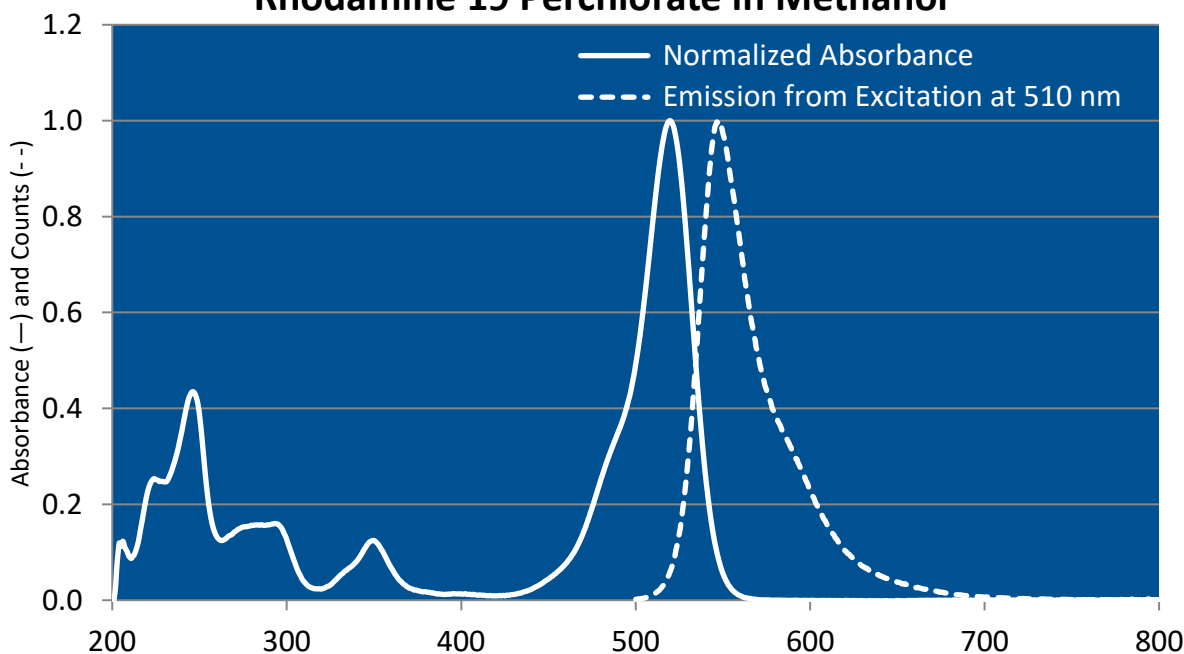


Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
562	552-582	Nd:YAG(355) ¹⁰⁹	Ethanol	4.1 x 10 ⁻⁴	528 ^{e,a}	543 ^{e,a}
567	556-586	Nd:YAG(532) ²⁴³	Methanol	4.3 x 10 ⁻⁴	518 ^{e,b}	
575		FL ²⁷	Ethanol ^b			
585		FL ²⁷	Ethanol ^a			

a = acidic; b = basic; e = ethanol

Rhodamine 19 Perchlorate in Methanol



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
544	0.95		Basic Ethanol	R-8	
Fluorescent quantum yield relative to QSH (ff 0.55) at 25 degrees C; $1.47 \times 10^{-7} \text{M}$					

REFERENCES:

- 27. What's Ahead in Laser Dyes, K.H. Drexhage, *Laser Focus*, 9(3), 35 (1973)
- 109. Tuning Ranges of 355 nm Pumped Dyes from 410-715 nm, D.M. Guthals and J.W. Nibler, *Optics Commun.*, 29(3), 322 (1979)
- 243. *Lambdachrome Laser Dyes*, U. Brackmann, 2nd ed., 1994
- R-8. Fluorescence Quantum Yields of Some Rhodamine Dyes, R.F. Kubin and A.N. Fletcher, *J. of Luminescence* 27, 455 (1982), [https://doi.org/10.1016/0022-2313\(82\)90045-X](https://doi.org/10.1016/0022-2313(82)90045-X)

For a current list of biology, biological stain, or biochemistry references for Rhodamine 19 Perchlorate from PubMed, click on the following link:

[Rhodamine 19](#) (zero references in PubMed as of May 2006)

Note that Rhodamine 19 is the perchloric acid salt of the zwitterion Rhodamine 575