

CRESYL VIOLET 670

Synonym: 5-imino-5H-benzo[a]phenoxazin-9-amine monoperchlorate

Catalog No.: 06700

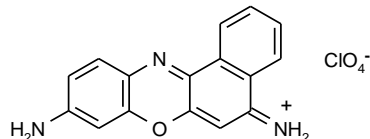
CAS No.: 41830-80-2

MW: 361.74

Chemical Formula: C₁₆H₁₁N₃O.HClO₄

Appearance: Green crystals

Structure:



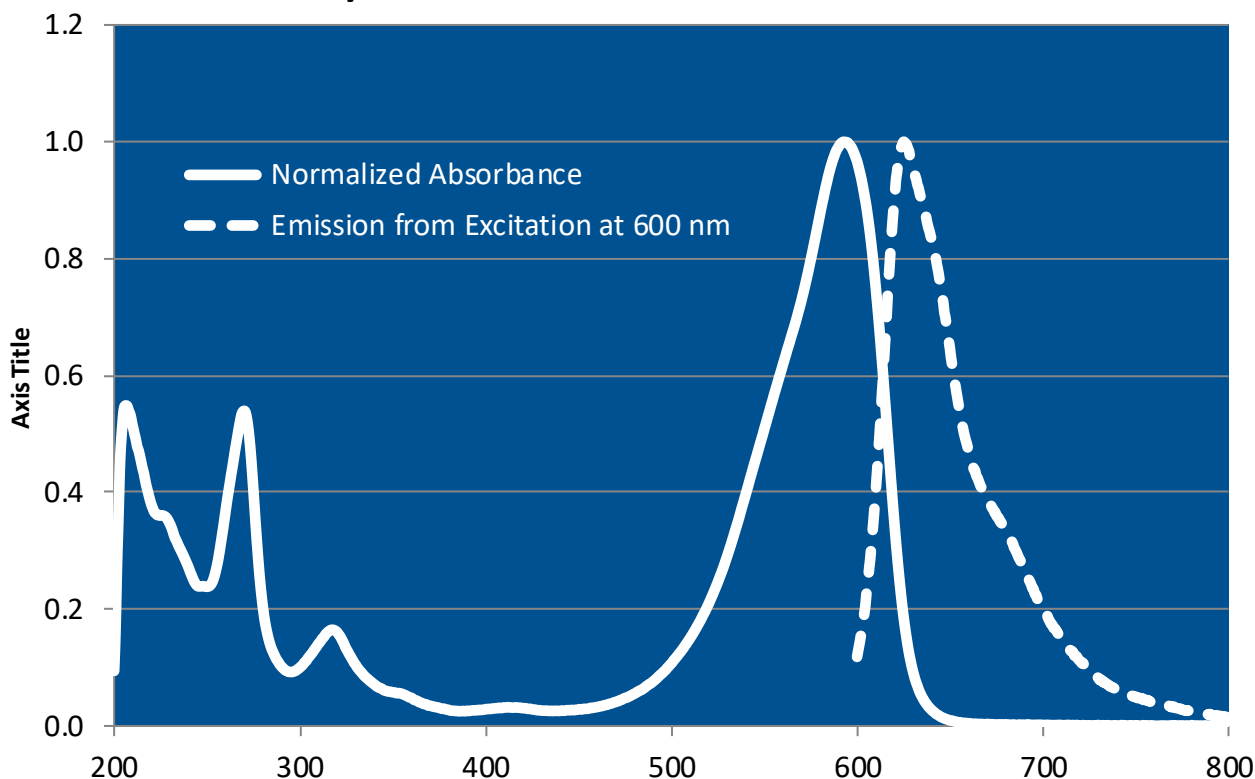
Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
	645-705	FL ³¹	Methanol		601 ^e	630 ^e
655	646-697	FL ³	Methanol	5 x 10 ⁻⁵	594 ^m	
659	650-695	FL ³	Ethanol	5 x 10 ⁻⁵		
664	631-705	FL ^{11a}	Methanol			
647	634-690	XeCl(308) ¹¹⁴	Methanol	1 x 10 ⁻³		
649	634-680	XeCl(308) ¹¹⁴	Methanol	2.8 x 10 ⁻⁴ (CV670). 1.2 x 10 ⁻³ (R640)		
653	634-686	XeCl(308) ¹¹⁰	Methanol	3 x 10 ⁻⁴ (CV670) 5 x 10 ⁻⁴ (R590)		
675	644-703	XeCl(308) ¹¹⁰	Methanol	6 x 10 ⁻³		
682	651-706	XeCl(308) ¹¹⁸	Ethanol	2 x 10 ⁻³ (osc)		
643	630-664	XeF(351) ¹⁵⁴	Ethanol	6.4 x 10 ⁻³ (CV670)+ 2 x 10 ⁻³ (R610)		
315*	302-326*	Nd:YAG(532) ³²	HFIP/H ₂ O			
317*		Nd:YAG(532) ⁵⁷				
320*	310-335*	Nd:YAG(532) ³²	MeOH/H ₂ O			
633	615-655	Nd:YAG(532) ⁵⁵				
637	620-660	Nd:YAG(532) ⁵⁷	Methanol			
638	629-655	Nd:YAG(532)→F548(544) ¹⁴⁸	Methanol	3.8 x 10 ⁻⁴ (CV670)+ 5.2 x 10 ⁻⁵ (R640)(osc), 6.8 x 10 ⁻⁵ (CV670)+ 3.1 x 10 ⁻⁵ (R640)(amp)		
639	620-670	Nd:YAG(532) ⁵⁸				
640	620-670	Nd:YAG(532) ³²	MeOH/H ₂ O			
646	625-660	Nd:YAG(532) ⁵⁴	Methanol	2 x 10 ⁻⁴		
647		Nd:YAG(532) ³³		4 x 10 ⁻⁴		
660	641-687	N ₂ (337) ⁵	Ethanol	2.5 x 10 ⁻³ (R590), 3.3 x 10 ⁻³ (CV670)		
673	650-696	Ar(cw) ^{14a}	EG			
695	675-708	Ar(458-514) ¹⁷	EG	2.4 x 10 ⁻³ (CV670)+(R590)		

* Frequency Doubled

HFIP/H₂O=hexafluoroisopropanol/water, MeOH/H₂O=methanol/water, EG=ethylene glycol, e=ethanol, m=methanol

Cresyl Violet 670 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
	625		Ethanol	3.5	C-3
600	648	0.56/0.86d	Ethanol	ffl = ROH/ROD; d=deuterium	O-2
	625-710	0.578	Ethanol		S-4
591	654	0.57/0.90d	Methanol	ffl = ROH/ROD; d=deuterium	O-2
			n-Propanol	14.4	O-1

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