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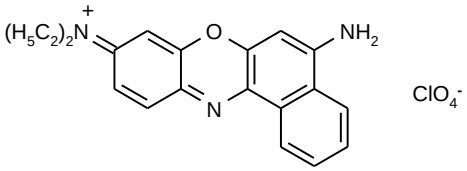
NILE BLUE 690 PERCHLORATE

Synonym: 5-amino-9-(diethylamino)-benzo[a]phenoxazin-7-ium perchlorate
Catalog No.: 06900
CAS No.: 53340-16-2
Chemical Formula: $C_{20}H_{20}N_3O.ClO_4$ **MW:** 417.85
Appearance: Dark green crystals
Structure:



Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
705		FL[3]	Methanol		624[e]	660[m]
717	689-750	FL[11a]	Methanol		628[e]	
722		FL	Methanol			
678	656-719	XeCl(308)[110]	Methanol	7×10^{-4}		
710	696-740	XeCl(308)[114]	Methanol	2.3×10^{-3}		
698	680-723	XeF(351)[154]	Ethanol	8×10^{-4}(NB690)+ 3.8×10^{-3}(R610)		
681	662-710	Nd:YAG(532)[58]				
683		Nd:YAG→CV670(647)[33]	Methanol	$2x10^{-4}$		
698	682-715	Nd:YAG(355)[109]	MeOH/H_2O,3/2	1.5×10^{-3}(NB690), 1.5×10^{-4}(R640)		
670	657-692	N_2(337)[111]	Ethanol	4×10^{-4}(NB690), 1.9×10^{-3}(R610)		
695	683-751	N_2(337)[114]	Ethanol	1.1×10^{-3}		
696	683-710	N_2(337)[5]	Ethanol	3.8×10^{-3}(R610), 8×10^{-4}(NB690)		
729	688-783	N_2(337)[90]	Ethanol			
730	692-782	Kr(cw)[14]	EG			
750	710-790	Kr(647)[17]	EG	1×10^{-3}		
695	682-730	Cu(511,578)[175]	Methanol	2×10^{-3}		

EG = Ethylene glycol; MeOH/H_2O = Methanol/water; e = ethanol; m = methanol

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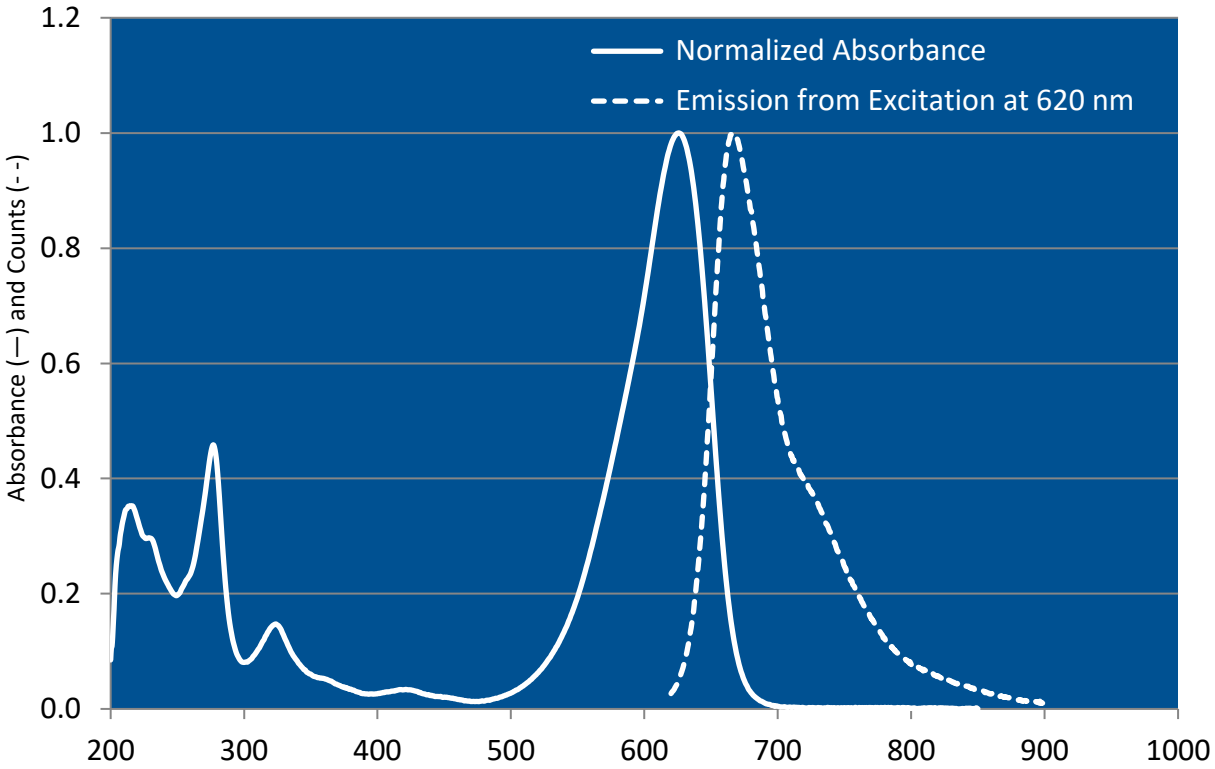
Nile Blue 690 Perchlorate in Methanol



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
	670		Ethanol	1.7	C-3
636	702	0.27 (24°C)	Ethanol		O-2
					ffl = ROH/ROD; ffl is temperature dependent
		0.11 (61°C)	Ethanol		O-2
					ffl = ROH/ROD; ffl is temperature dependent
639	705	0.26 (24°C)	Ethylene Glycol		O-2
					ffl = ROH/ROD; ffl is temperature dependent
		0.5DCE - 0.6(+D2O)			O-2
					ffl = ROH/ROD; ffl is temperature dependent

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For a current list of biology, biological stain, or biochemistry references for Nile Blue 690 Perchlorate from PubMed, click on the following link:

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