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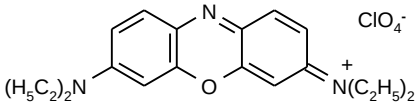
OXAZINE 725
PERCHLORATE or CHLORIDE

Synonym: 3,7-bis(diethylamino)phenoxazin-5-ium perchlorate; Oxazine 1
Phenoxazin-5-ium, 3,7-bis(diethylamino)-, perchlorate (1:1)
Phenoxazin-5-ium, 3,7-bis(diethylamino)-, chloride (1:1)
Catalog No.: 07250 (perchlorate), 07251 (chloride)
CAS No.: 24796-94-9 (perchlorate); 33203-82-6 (chloride); 47367-75-9 (cation only)
Chemical Formula: $C_{20}H_{26}N_3O.ClO_4$ $C_{20}H_{26}N_3O.Cl$ **MW:** 423.90 (07250), 359.90 (07251)
Appearance: Green bronzy crystals
Structure:



Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
681		FL→R610(622)[65]	CH_2Cl_2	4×10^{-5}	645[e]	680[e]
695		FL→R610(622)[65]	DMSO	1×10^{-4}		
715		FL[27]	Ethanol			
725	705-745	FL[11]	MeOH/R590			
740	720-758	FL[3]	CH_2Cl_2	3.3×10^{-5}		
725	690-765	XeCl(308)[114]	Methanol	2.4×10^{-3}		
730	692-751	XeCl(308)[110]	Methanol	1×10^{-3}		
734	692-768	XeCl(308)[118]	Ethanol	2.1×10^{-3}		
742	702-772	XeCl(308)[110]	Methanol	2×10^{-3}		
735	705-758	XeF(351)[154]	Ethanol	5×10^{-3}(OX725)+ 5×10^{-3}(R610)		
675	657-695	Nd:YAG(532)[116]	Methanol	4.9×10^{-5}(OX725), 9.5×10^{-4}(R640)		
690		Nd:YAG(532)[33]	CH_2Cl_2	4×10^{-4}		
690	671-712	Nd:YAG(532)[116]	Methanol	2×10^{-5}(OX725), 9.5×10^{-4}(R640)		
720	695-755	Nd:YAG(532)[116]	Methanol	1.2×10^{-3}(OX725), 6×10^{-4}(R640)		
724	695-761	Nd:YAG(532)[53]	Methanol			
725	705-750	N_2(337)[5] Ethanol		5×10^{-3}(R610), 5×10^{-3}(OX725)		
730	692-751	N_2(337)[111]	Ethanol/DMSO,96/4	2.3×10^{-3}(OX725), 2.5×10^{-3}(R610)		
730	692-751	N_2(337)[183]	DMSO	20mg/20ml		
750	736-765	N_2(337)[111]	DMSO	2×10^{-2}		
723	688-800	Kr(Red)[68] EG				
	687-826	Kr(647)[71]	DMSO/EG,1/3 + COT	1×10^{-3}		
745	645-810	Kr(647,676)[36b]	DMSO/EG or G	1.1×10^{-3}		
750	695-801	Kr(647,676)[17]	EG/DMSO,84/16	6×10^{-4}		
729		HeNe(633,20mW)[170]	EtOH(-35°C)	1.6×10^{-3}		
760	744-776	AlGInP (laser diode, 674)[208]	EG	1.81×10^{-3}		
760	750-770	AlGInP (laser diode, 674)[208a]	EG	1.81×10^{-3}		

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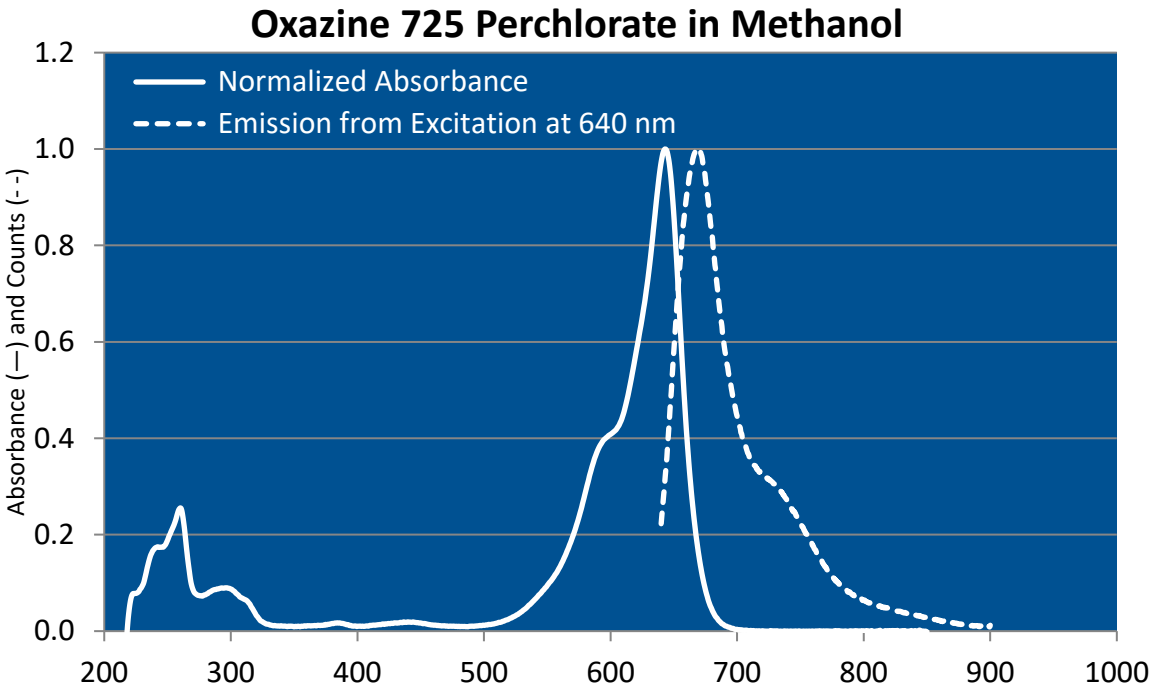
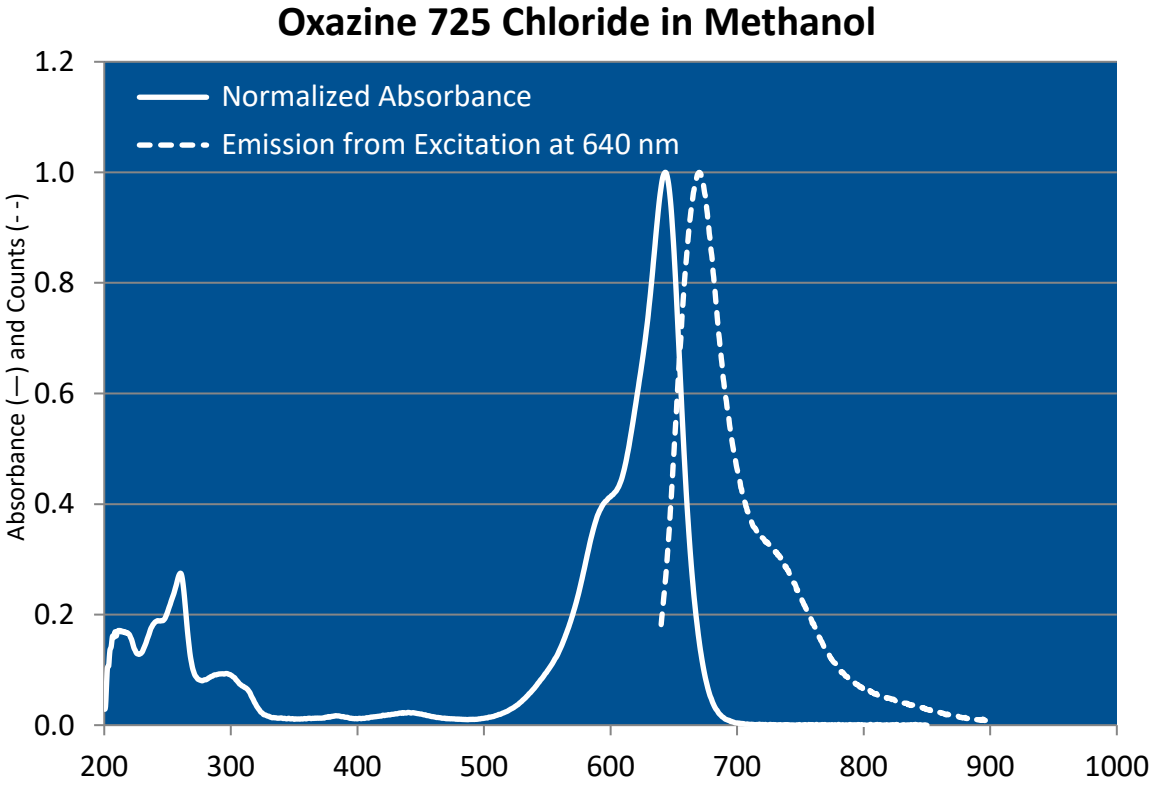
DMSO = Dimethylsulfoxide; EG = Ethylene Glycol; EtOH = Ethanol; G = Glycerol; COT = Cyclooctatetraene; MeOH = Methanol; CH_2Cl_2 = Methylene Chloride; e = Ethanol





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For a current list of biology, biological stain, or biochemistry references for Oxazine 725 Perchlorate from PubMed, click on the following link:

Oxazine 725 or Oxazine 1 (all references are listed under Oxazine 1 as of May 2006)