

OXAZINE 750 PERCHLORATE or CHLORIDE

Synonym: 2,3,6,7-tetrahydro-5-(ethylimino)-1H,5H-benzo[a]phenoxazin-[8,9,10-ij]quinolizin perchlorate
1H,5H-Benzo[a]quinolizino[1,9-hi]phenoxazin-16-ium, 14-(ethylamino)-2,3,6,7-tetrahydro-, perchlorate (1:1)

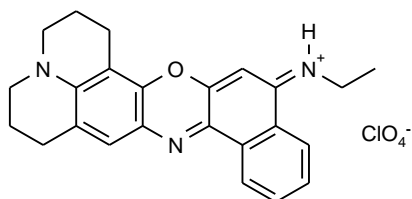
Catalog No.: 07500 (perchlorate) or 07501 (chloride)

CAS No.: Cation only: 67556-77-8; 85256-40-2 (perchlorate salt); none (chloride salt)

Chemical Formula: C₂₄H₂₄N₃O.ClO₄ or C₂₄H₂₄N₃O.Cl **MW:** 469.92 (07510) or 405.92 (07501)

Appearance: Dark green crystals with sheen (07500, 07501)

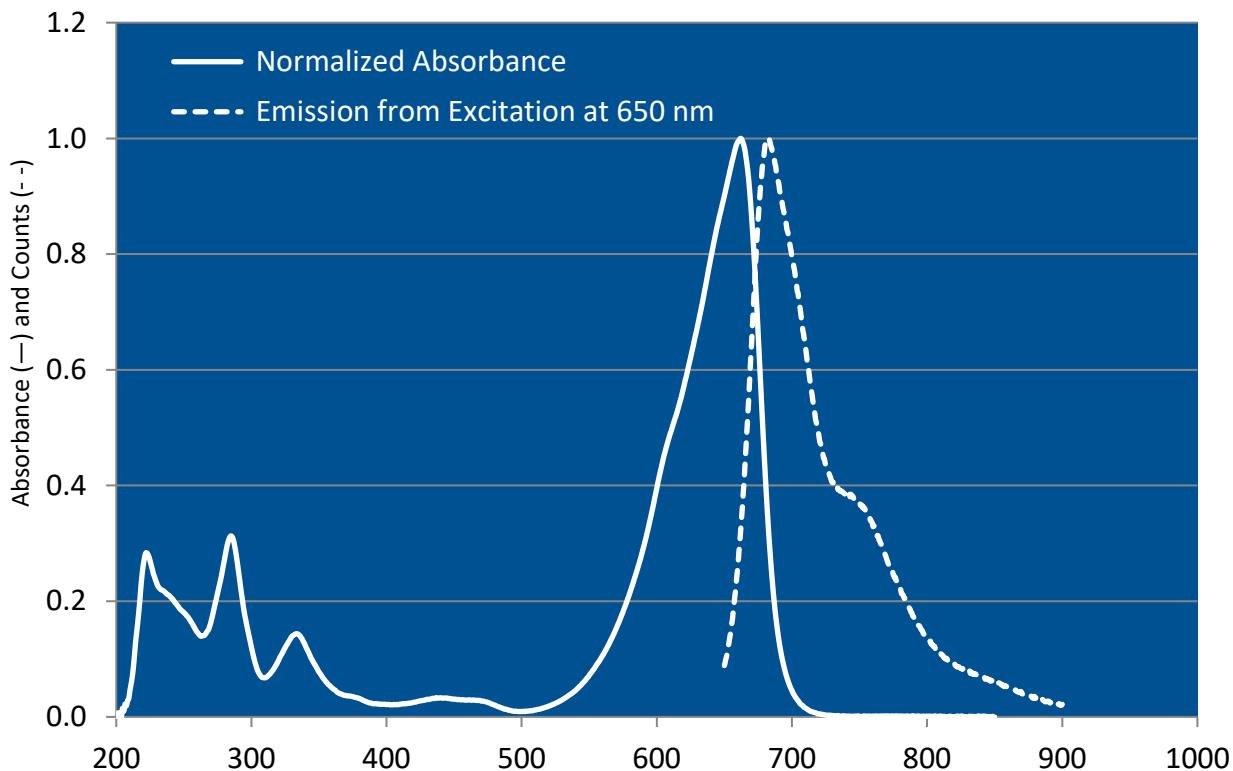
Structure:



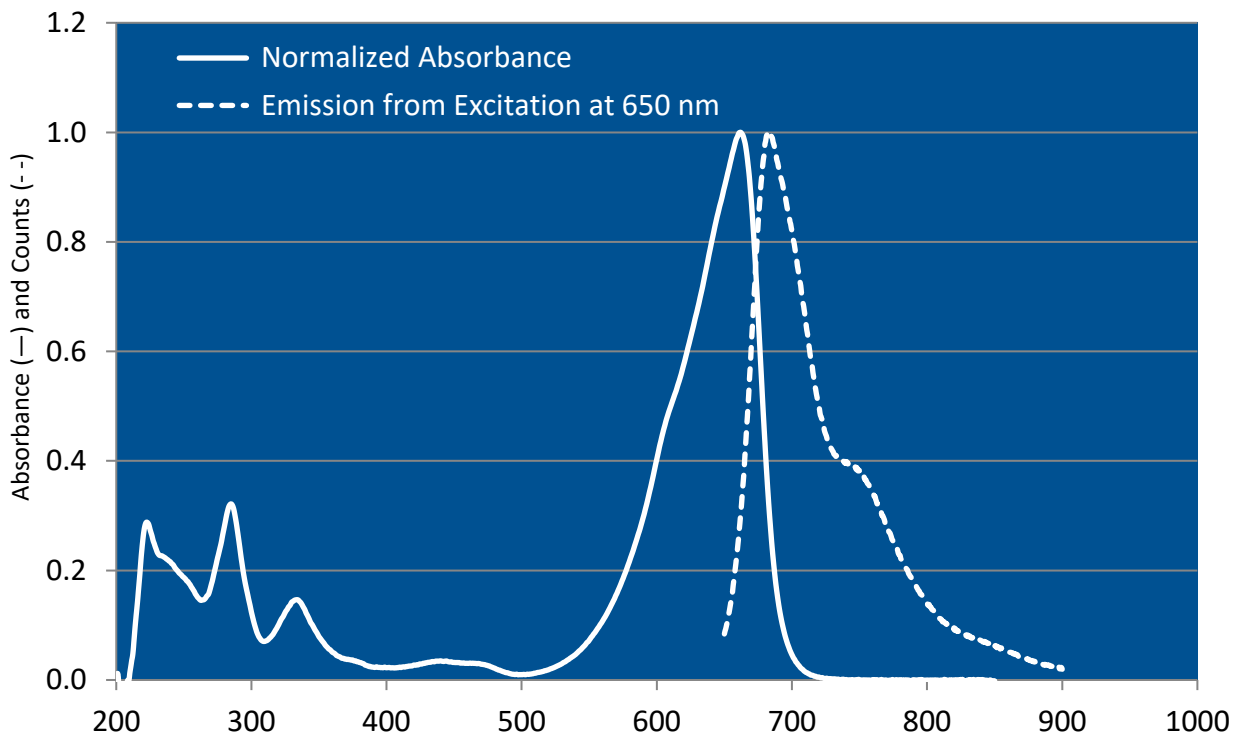
Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
745	700-785	FL→R640(660) ³	Ethanol	3 x 10 ⁻⁴	662 ^m	705 ^m
750	720-780	FL ³	Methanol	1 x 10 ⁻⁴		
758	719-795	XeCl(308) ¹¹⁴	Methanol/DMSO,9/1	2.1 x 10 ⁻³		
767	734-807	XeCl(308) ¹¹⁴	DMF	2.1 x 10 ⁻³		
790	775-827	XeCl(308) ¹¹⁴	DMF	1.6 x 10 ⁻³ (OX750), 2.5 x 10 ⁻⁴ (HITC)		
811	797-873	XeCl(308) ¹¹⁴	DMF	1.1 x10 ⁻³ (OX750), 7 x 10 ⁻⁴ (HITC)		
700	683-722	Nd:YAG(532) ¹¹⁶	Methanol/DMSO,98/2	1.2 x 10 ⁻⁴ (OX750), 9.5 x 10 ⁻⁴ (R640)		
722	704-786	Nd:YAG(532) ⁵³	Methanol			
755	735-784	Nd:YAG(532) ¹¹⁶	Ethanol/DMSO,2/1	1.3 x 10 ⁻³ (OX750), 7 x 10 ⁻⁴ (R640)		
724	708-780	N ₂ (337) ¹¹⁴	Ethanol/DMSO,9/1	1.1 x 10 ⁻³		
730	693-752	N ₂ (337) ¹¹¹	Ethanol/DMSO,96/4	2.5 x 10 ⁻³ (R610), 2.3 x 10 ⁻³ (OX750)		
750	740-762	N ₂ (337) ¹¹¹	DMSO	2 x 10 ⁻²		
767	725-808	N ₂ (337) ⁹⁰		1.9 x 10 ⁻³		
767	750-910	Kr(647) ¹³¹	PC/EG	80% pump absorption		
770	750-835	Kr(647) ⁴⁷	EG/DMSO,4/1	8.5 x 10 ⁻⁴		
775	747-885	Kr(647,676) ¹⁷	EG/DMSO,84/16	6 x 10 ⁻⁴		
776	747-801	Kr(647,676) ⁸⁸	EG/DMSO,2/1	1.2 x 10 ⁻³		
780	749-825	Kr(647,676) ⁸⁸	EG	1.4 x 10 ⁻³		
805	785-890	Kr(647,676) ¹³²	PC/EG,1/18	1.33 x 10 ⁻³		
760	715-785	R640	EG/DMSO,84/16			
772	761-787	AlGaInP (laser diode, 670) ²⁰⁸	EG/PC,20/1	6.44 x 10 ⁻⁴		

DMSO = Dimethylsulfoxide; EG = Ethylene Glycol; PC = Propylene Carbonate; DMF = Dimethylformamide; m = Methanol

Oxazine 750 Chloride in Methanol



Oxazine 750 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.

REFERENCES:

3. Phase-R Corporation, Box G-2 Old Bay Rd., New Durham, NH 03855
17. Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039
47. Subpicosecond Light Pulses from a Synchronously Mode-Locked Dye Laser with Composite Gain and Absorber Medium, G.W. Fehrenback, K.J. Gruntz, and R.G. Ulbrich, *Appl. Phys. Lett.*, 33(2), 159 (1978)
53. Continuum, 3150 Central Expressway, Santa Clara, CA 95051, formerly, Quantel International
88. D.A. Bryon, private commun., 1979
90. Jobin Yvon, 16-18 rue du Canal B.P. 118, 91163 Longjumeau Cedex France
111. Lasing Properties of Several Near-IR Dyes for a Nitrogen Laser-Pumped Dye Laser with an Optical Amplifier, B.M. Pierce and R.R. Birge, *IEEE J. Quantum Electron.*, QE18, 1164 (1982)
114. Optimization of Spectral Coverage in an Eight-Cell Oscillator-Amplifier Dye Laser Pumped at 308nm, F. Bos, *Appl. Optics*, 20, 3553 (1981)
116. Versatile High-Power Single-Longitudinal-Mode Pulsed Dye Laser, F. Bos, *Appl. Optics*, 20(10), 1886 (1981)
131. Near Infrared, Tunable, Oxazine 750 Perchlorate, Synchronously-Pumped Picosecond Ring Dye Laser, D.J. Eilenberger, E.D. Isaacs and G.D. Aumiller, *Optics Commun.*, 44(5), 350 (1983)
132. Broadly Tunable Near IR CW Dye Laser using Propylene Carbonate as a Solvent, G.D. Aumiller, *Optics Commun.*, 41(2), 115 (1982)
208. Near-IR Dye Laser for Diode-Pumped Operation, R. Scheps, *IEEE J. Quantum Electron.* 31(1), 126 (1995)

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