

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)

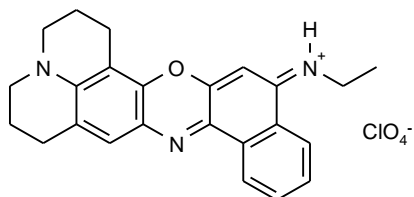
Catalog No.: 07500 (perchlorate) or 07501 (chloride)

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:



Lasering 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 x 10 ⁻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

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)

For a current list of biology, biological stain, or biochemistry references for Oxazine 750 Perchlorate from PubMed, click on the following link:

[Oxazine 750](#)