

RHODAMINE 101 INNER SALT

Catalog No.: 06399

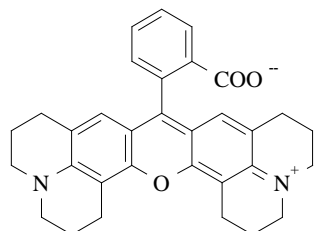
CAS No.: 116450-56-7

Chemical Formula: C₃₂H₃₀N₂O₃

Absorption max (in methanol): 567nm

Molar absorptivity (at 567nm): 10.50 x 10⁴ L mole⁻¹ cm⁻¹

Structure:



MW: 490.61

Assay: By UV-Vis

Fluorescence max (in methanol): 588nm

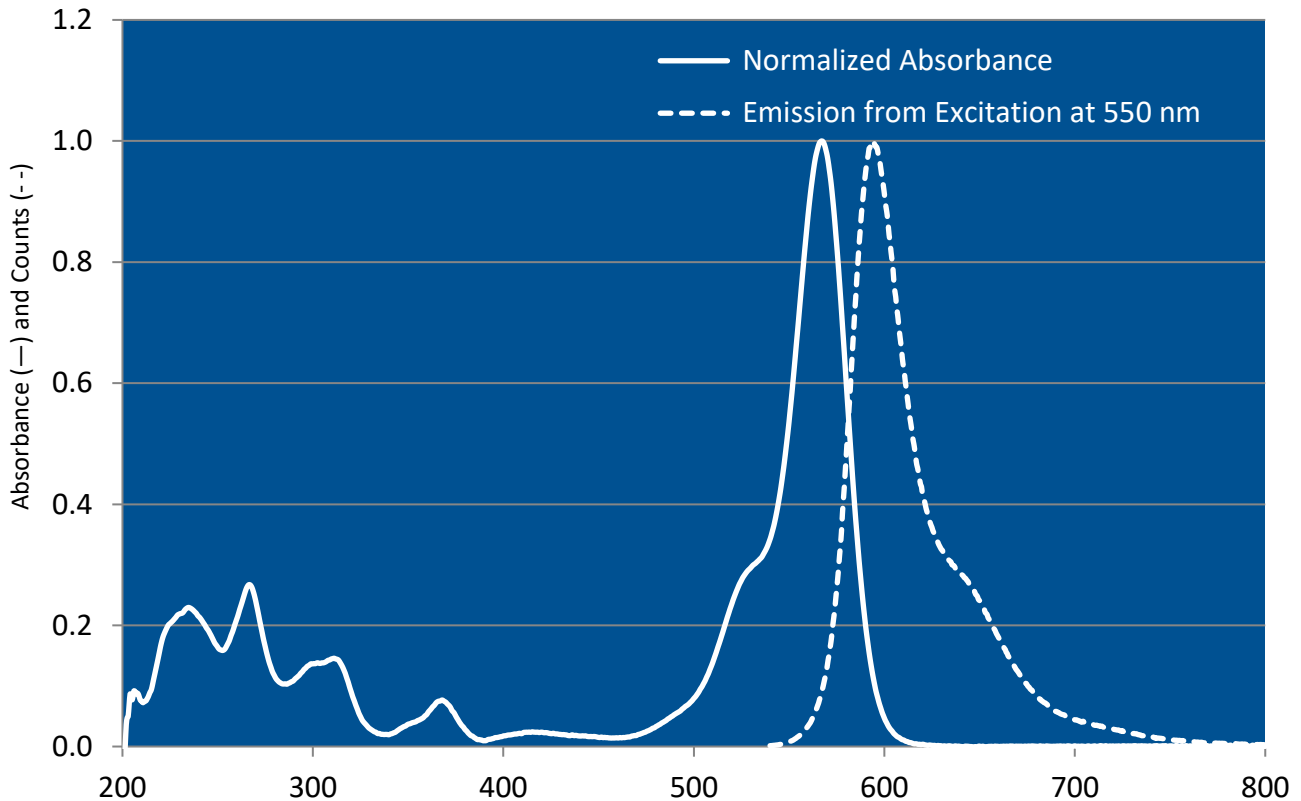
Optimum lasing (in methanol): 640nm

Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source** (nm)	Solvent†	Concentration (molar)
630		FL ²⁷	Ethanol(basic)	
635	610-670	FL ⁶⁹	Methanol	4 x 10 ⁻⁵
640		FL ²⁷	Ethanol(acidic)	
642	627-657	FL ⁶⁹	Methanol	
643	623-657	FL ³	Ethanol	1 x 10 ⁻⁴
650		FL ⁶³	Methanol	1.2 x 10 ⁻⁴
652	620-687	FL ¹²	MeOH/H ₂ O,3/2	1.1 x 10 ⁻⁴
618	608-668	XeCl(308) ¹¹⁴	Ethanol	1.3 x 10 ⁻³
623	613-672	XeCl(308) ¹¹⁸	Ethanol	1.2 x 10 ⁻³ (osc)
625	610-673	XeCl(308) ²⁰⁴	Methanol	1.25 x 10 ⁻³ (osc) 7 x 10 ⁻⁴ (amp)
602	589-623	Nd:YAG(532) ⁵⁵		
603	598-626	Nd:YAG(532) ⁵⁷	Methanol	2.4 x 10 ⁻⁴ (osc) 3.2 x 10 ⁻⁵ (amp)
605	594-629	Nd:YAG(532) ⁵³	Methanol	R640(3.6x10 ⁻⁵) + R610(7.9x10 ⁻⁵) (osc) R640(1.8x10 ⁻⁵) + R610(3.9x10 ⁻⁵) (amp)
611		Nd:YAG(532) ⁵⁴	Methanol	5 x 10 ⁻⁴
612	598-640	Nd:YAG(532) ⁵⁸		
613	605-630	Nd:YAG(532) ⁵³	Methanol	3.6 x 10 ⁻⁴ (osc), 1.9 x 10 ⁻⁴ (amp)
620	608-668	Nd:YAG(532) ¹¹⁶	Ethanol	5 x 10 ⁻⁴
650	620-680	Nd:YAG(355) ¹⁰⁹	MeOH/H ₂ O,3/2	3.5 x 10 ⁻³
635	590-665	N ₂ (337) ¹⁸³	Methanol	5.1 x 10 ⁻³
640	620-680	N ₂ (337) ³⁰	Ethanol	5 x 10 ⁻³
644	620-673	N ₂ (337) ⁵⁰	Ethanol	5.7 x 10 ⁻³
652	620-678	N ₂ (337) ¹¹⁴	Ethanol	5.1 x 10 ⁻³
659	626-700	N ₂ (337) ⁹⁰	Ethanol	5 x 10 ⁻³
671	634-704	N ₂ (337) ⁷³	DMSO + HCl	

645	620-690	Ar(458-514) ¹⁷	EG	1.5×10^{-3} (R640), 1.5×10^{-3} (R590)
648	608-710	Ar or Kr(568) ⁶⁸	MeOH/EG, 1/7.5	80% pump absorption
652	624-675	Ar(vis) ⁸⁷	EG	2×10^{-3} (R640), 1×10^{-3} (R590)
616	605-633	Cu(511,578) ¹⁵³	Methanol	1×10^{-3}
630	607-659	Cu(511,578) ¹⁷⁵	Methanol	

Rhodamine 101 Inner Salt 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
12. Chromatix, 560 Oak Meade Parkway, Sunnyvale, CA 94086
17. Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039
27. What's Ahead in Laser Dyes, K.H. Drexhage, *Laser Focus*, 9(3), 35 (1973)
30. S. Woodruff and D. Ahlgren, private commun., 1977
50. G. Holtom, private commun., 1978
53. Continuum, 3150 Central Expressway, Santa Clara, CA 95051, formerly, Quantel International
54. W. R. Green, private commun., 1977
55. A High-Power Dye-Laser Pumped by the Second Harmonic of a Nd-YAG Laser, W. Hartig, *Optics Commun.*, 27(3), 447 (1978)

57. Quanta-Ray, Note: Quanta-Ray is now incorporated as a part of Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039
58. J.K. Lasers Ltd., Somers Road, Rugby, Warwickshire, U. K.
63. High Energy Pulsed Dye Lasers for Atmospheric Sounding, J.Y. Allain, *Appl. Optics*, 18(3), 287 (1979)
68. Coherent Inc., 3210 Porter Dr., Palo Alto, CA 94304
69. Candela Laser Corporation, 530 Boston Post Road, Wayland, MA 01778-1833
73. Laser Dye DCM, Spectral Properties, Synthesis and Comparison with other Dyes in the Red, P.R. Hammond, *Optics Commun.*, 29(3), 331 (1979)
87. The Selective Excitation of Lithium Isotopes by Intracavity Nonlinear Absorption in a CW Dye Laser, M. Yamashita, M. Kasamatsu, H. Kashiwagi and K. Mashida, *Optics Commun.*, 26(3), 343 (1978)
90. Jobin Yvon, 16-18 rue du Canal B.P. 118, 91163 Longjumeau Cedex France
109. Tuning Ranges of 355 nm Pumped Dyes from 410-715 nm, D.M. Guthals and J.W. Nibler, *Optics Commun.*, 29(3), 322 (1979)
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)
118. The XeCl Excimer Laser: A Powerful and Efficient UV Pumping Source for Tunable Dye Lasers, H. Telle, W. Huffer and D. Basting, *Optics Commun.*, 38(5,6), 402 (1981)
153. Cooper LaserSonics, Inc. 5674 Sonoma Drive, Pleasanton, CA 94566
175. CVL-Pumped Dye Laser For Spectroscopic Application, M. Broyer, J. Chevaleyre, G. Delacretaz and L. Wöste, *App. Phys. B*, 35, 31 (1984)
183. Laser Science, Inc., 26 Landsdowne Street, Cambridge, MA 02139
204. Questek, Inc., 44 Manning Road, Billerica, MA 01821 (Tuning Curves for Model 5200B Dye Laser, PDL-3)