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RHODAMINE 101 INNER SALT

Catalog No.: 06399

CAS No.: 116450-56-7

Chemical Formula: $C_{32}H_{30}N_2O_3$

Absorption max (in methanol): 567nm

Molar absorptivity (at 567nm): $8.33 \times 10^3 \text{ L mole}^{-1} \text{ cm}^{-1}$

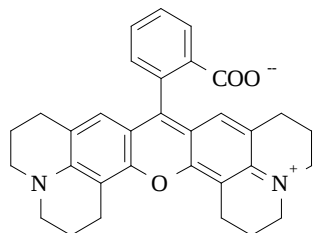
Structure:

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	4×10^{-5}
640		FL ²⁷	Ethanol(acidic)	
642	627-657	FL ⁶⁹	Methanol	
643	623-657	FL ³	Ethanol	1×10^{-4}
650		FL ⁶³	Methanol	1.2×10^{-4}
652	620-687	FL ¹²	MeOH/H ₂ O,3/2	1.1×10^{-4}
618	608-668	XeCl(308) ¹¹⁴	Ethanol	1.3×10^{-3}
623	613-672	XeCl(308) ¹¹⁸	Ethanol	$1.2 \times 10^{-3}(\text{osc})$
625	610-673	XeCl(308) ²⁰⁴	Methanol	$1.25 \times 10^{-3}(\text{osc}),$ $7 \times 10^{-4}(\text{amp})$
602	589-623	Nd:YAG(532) ⁵⁵		
603	598-626	Nd:YAG(532) ⁵⁷	Methanol	$2.4 \times 10^{-4}(\text{osc}),$ $3.2 \times 10^{-5}(\text{amp})$
605	594-629	Nd:YAG(532) ⁵³	Methanol	R640(3.6×10^{-5}) + R610(7.9×10^{-5})(osc), R640(1.8×10^{-5}) + R610(3.9×10^{-5})(amp)
611		Nd:YAG(532) ⁵⁴	Methanol	5×10^{-4}
612	598-640	Nd:YAG(532) ⁵⁸		
613	605-630	Nd:YAG(532) ⁵³	Methanol	$3.6 \times 10^{-4}(\text{osc}),$ $1.9 \times 10^{-4}(\text{amp})$
620	608-668	Nd:YAG(532) ¹¹⁶	Ethanol	5×10^{-4}
650	620-680	Nd:YAG(355) ¹⁰⁹	MeOH/H ₂ O,3/2	3.5×10^{-3}
635	590-665	N ₂ (337) ¹⁸³	Methanol	5.1×10^{-3}
640	620-680	N ₂ (337) ³⁰	Ethanol	5×10^{-3}
644	620-673	N ₂ (337) ⁵⁰	Ethanol	5.7×10^{-3}
652	620-678	N ₂ (337) ¹¹⁴	Ethanol	5.1×10^{-3}

Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source** (nm)	Solvent†	Concentration (molar)
—				
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 x 10 ⁻³ (R640), 1.5 x 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 x 10 ⁻³ (R640), 1 x 10 ⁻³ (R590)
616	605-633	Cu(511,578) ¹⁵³	Methanol	1 x 10 ⁻³
630	607-659	Cu(511,578) ¹⁷⁵	Methanol	

Catalog References:

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204. Questek, Inc., 44 Manning Road, Billerica, MA 01821 (Tuning Curves for Model 5200B Dye Laser, PDL-3)