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## EXALITE 404

Catalog No.: 04040

CAS No.: N/A

MW: 658

Appearance: White crystalline solid

Max. Lasing Wavelength (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs $\lambda$ -max	FI $\lambda$ -max
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The Exalite dyes (Exalite 392A, Exalite 404, Exalite 411, Exalite 417 and Exalite 428) all have excellent operating lifetimes. The preferred solvent is p-Dioxane. Most of these dyes have very high absorption coefficients at 355nm, making them excellent candidates for pumping with the third harmonic of the Nd:YAG laser as well as under XeCl(308nm) pumping.

404	392-415	XeCl(308) <sup>177c</sup>	p-Dioxane	$4.9 \times 10^{-4}$	332 <sup>c</sup>	381 <sup>c</sup>
404	396-413	Nd:YAG(355) <sup>110</sup>	p-Dioxane	$\sim 7.5 \times 10^{-5}$		400
404	396-414	Nd:YAG(355) <sup>57</sup>	p-Dioxane	$4.4 \times 10^{-4}$ (osc), $0.9 \times 10^{-4}$ (amp)		420(sh)
405	399-410	Nd:YAG(355) <sup>239</sup>	p-Dioxane	$2.3 \times 10^{-4}$		

c = cyclohexane

### REFERENCES:

57. Quanta-Ray, Note: Quanta-Ray is now incorporated as a part of Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039
110. Lumonics Inc., 105 Schneider Road, Kanata, (Ottawa), Ontario, Canada K2K 1Y3
177. Exciton and Associates, unpublished data, 1987-1989; **a.** Characterization of New Excimer Pumped UV Laser Dyes I. p-Terphenyls, D.J. Schneider, D.A. Landis, P.A. Fleitz, C.J. Seliskar, J.M. Kauffman and R.N. Steppel, *Laser Chem.*, 11, 49 (1991); **b.** Characterization of New Excimer Pumped UV Laser Dyes 2. p-Quaterphenyls, P.A. Fleitz, C.J. Seliskar, R.N. Steppel, J.M. Kauffman, C.J. Kelley and A. Ghorghis, *Laser Chem.*, 11, 99 (1991); **c.** Characterization of New Excimer Pumped UV Laser Dyes 3. p-Quinque-, Sexi-, Octi- and Deciphenyls, C.J. Seliskar, D.A. Landis, J.M. Kauffman, M.A. Aziz, R.N. Steppel, C.J. Kelley, Y. Qin and A. Ghorghis, *Laser Chem.*, 13(1), 19 (1993)
239. P. Jauernik, private commun., Sirah Laser- und Plasmatechnik, 2003.