

## EXALITE 404

**Synonym:** 2,2[Bis(7-(2,2-dimethylpropyl)-9,9-dipropyl)-9H-fluorene]-1,4-benzene

**Catalog No.:** 04040

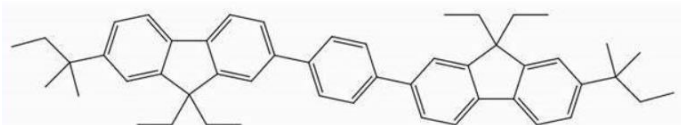
**CAS No.:** 153307-11-0

**Chemical Formula:** C<sub>50</sub>H<sub>58</sub>

**MW:** 658

**Appearance:** White crystalline solid

**Structure:**



### Lasing Wavelength

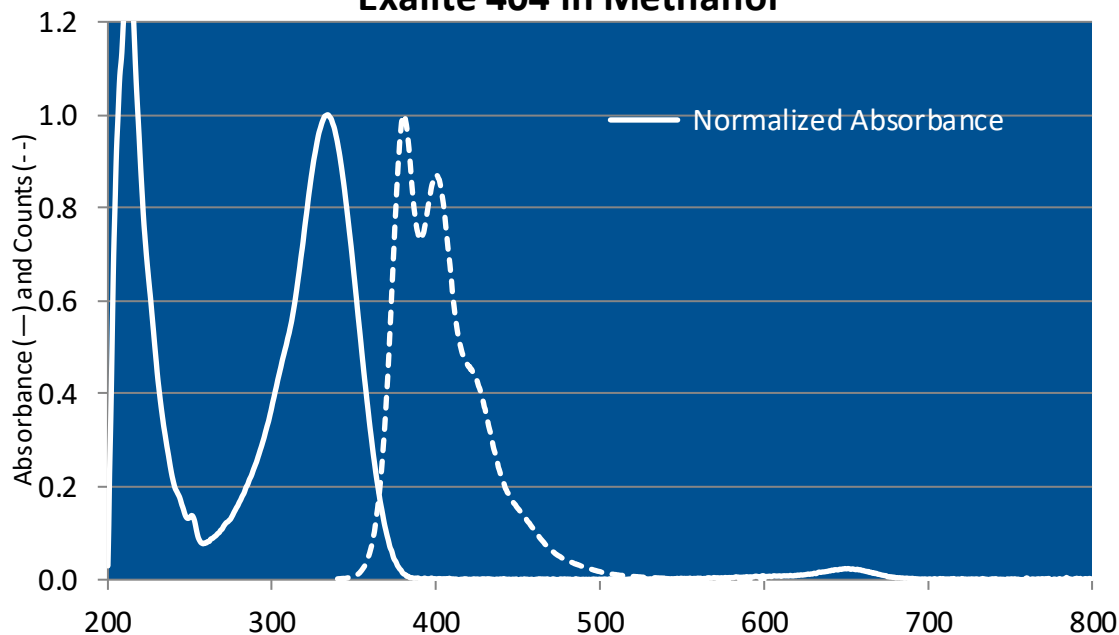
Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
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The Exalite dyes (Exalite 392A, Exalite 404, Exalite 411, Exalite 417 and Exalite 428) all have excellent operating lifetimes. The preferred solvent is p-Dioxane. 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 x 10 <sup>-4</sup>	332 <sup>c</sup>	381 <sup>c</sup>
404	396-413	Nd:YAG(355) <sup>110</sup>	p-Dioxane	~7.5 x 10 <sup>-5</sup>		400
404	396-414	Nd:YAG(355) <sup>57</sup>	p-Dioxane	4.4 x 10 <sup>-4</sup> (osc), 0.9 x 10 <sup>-4</sup> (amp)		420(sh)
405	399-410	Nd:YAG(355) <sup>239</sup>	p-Dioxane	2.3 x 10 <sup>-4</sup>		

c = cyclohexane

### Exalite 404 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:

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  - 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. Ghiorghis, *Laser Chem.*, 11, 99 (1991);
  - c. Characterization of New Excimer Pumped UV Laser Dyes 3. p-Quinqui-, 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. Ghiorghis, *Laser Chem.*, 13(1), 19 (1993)
239. P. Jauernik, private communication, Sirah Laser- und Plasmatechnik, 2003.