

LDS 750

Synonym: 2-[4-[4-(dimethylamino)phenyl]-1,3-butadienyl]-3-ethyl-naphtho[2,1-d]thiazolium perchlorate; Styryl 7

Catalog No.: 07505

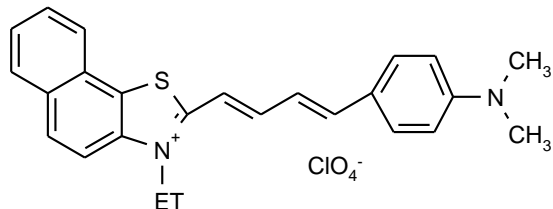
CAS No.: 89872-07-1

MW: 484

Chemical Formula: C₂₅H₂₅N₂S.ClO₄

Appearance: Green crystalline solid

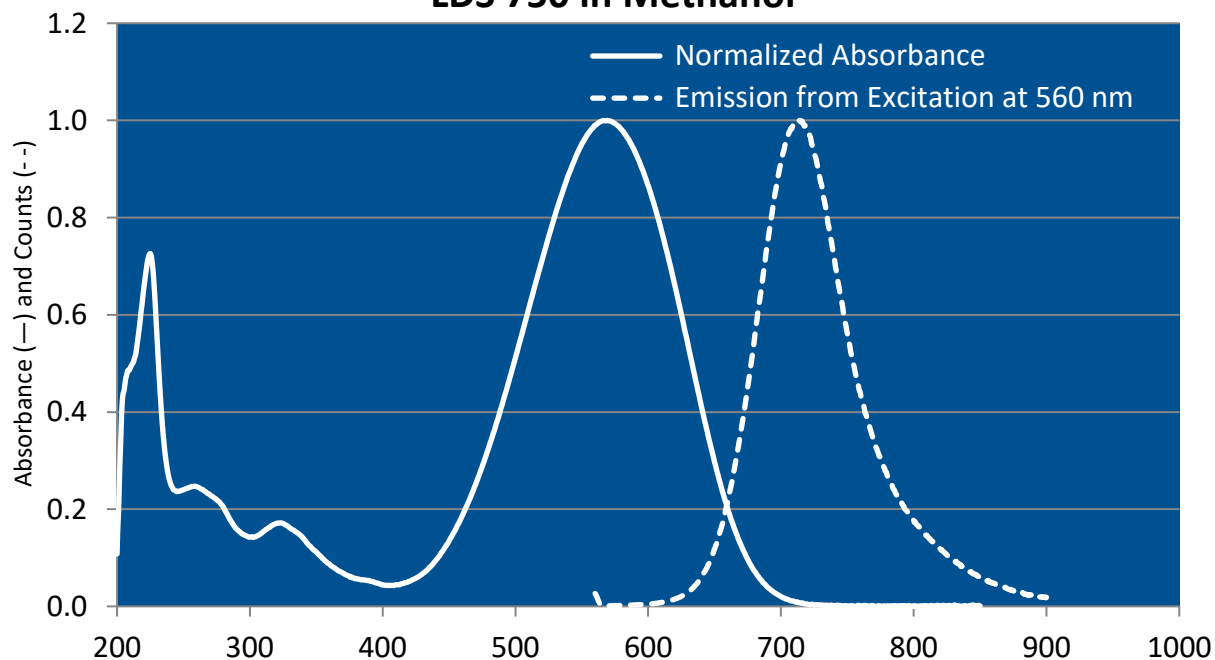
Structure:



Max. Lasing Wavelength (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
718	699-743	Nd:YAG(532) ¹¹⁰	Methanol	3 x 10 ⁻⁴	572	704 ^m
719	693-757	Nd:YAG(532) ⁵³	Methanol	8 x 10 ⁻⁵ (osc), 3 x 10 ⁻⁵ (amp)		
720	716-725	Nd:YAG(532)→F548(544) ¹⁴⁸	Methanol	3.4 x 10 ⁻⁴ (osc), 1.5 x 10 ⁻⁴ (amp)		
722	698-743	Nd:YAG(side-p,532) ⁵⁷	Methanol	2.4 x 10 ⁻⁴ (osc), 1.2 x 10 ⁻⁴ (amp)		
722	698-743	Nd:YAG(end-p,532) ⁵⁷	Methanol	2.4 x 10 ⁻⁴ (osc), 3.1 x 10 ⁻⁵ (amp)		
753	720-790	Nd:YAG(532) ⁸³	EG			

EG = ethylene glycol; m = methanol

LDS 750 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.

Quantum Yields and Lifetimes

Absorbance (nm)	Emission (nm)	Quantum Yield (max = 1.0)	Solvent	Lifetime (ns)	References, Notes
	720		Ethanol Knorr JPC A 2000, 104, 9494-9499: Methanol 0.4%, CD3OD 0.5%	61±5ps	S-3
	700		PMMA	135±18ps	S-3

REFERENCES:

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- 83. High-Efficiency, High-Power Difference-Frequency Generation at 2-4 um in LiNbO₃, K. Kato, *IEEE J. Quantum Electron.*, QE16(10), 1017 (1980)
- 110. Lumonics Inc., 105 Schneider Road, Kanata, (Ottawa), Ontario, Canada K2K 1Y3
- 148. Dye Laser Radiation in the 605-725nm Region Pumped by a 544nm Fluorescein Dye Laser, K.D. Bonin and T.J. McIlrath, *Applied Optics*, 23(17), 2854 (1984)
- S-3. Fluorescence Lifetime Imaging on the Picosecond Timescale, S. Brustlein, F. Devaux, B. Wacogne and E. Lantz, *Laser Physics* 14 (2), 238 (2004), <https://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&lang=en&idt=15556172>

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

[LDS 750](#) (zero references as of May 2006)