

LDS 722

Synonym: 4-[4-[4-(dimethylamino)phenyl]-1,3-butadieny]-1-ethyl-pyridinium perchlorate; Pyridine 2

Catalog No.: 07220

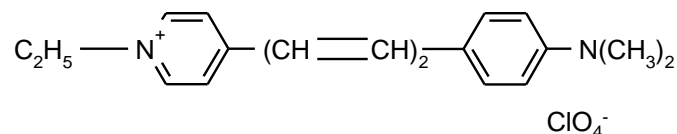
CAS No.: 89846-21-9

Chemical Formula: C₁₉H₂₃N₂.ClO₄

MW: 378.85

Appearance: Purple crystals

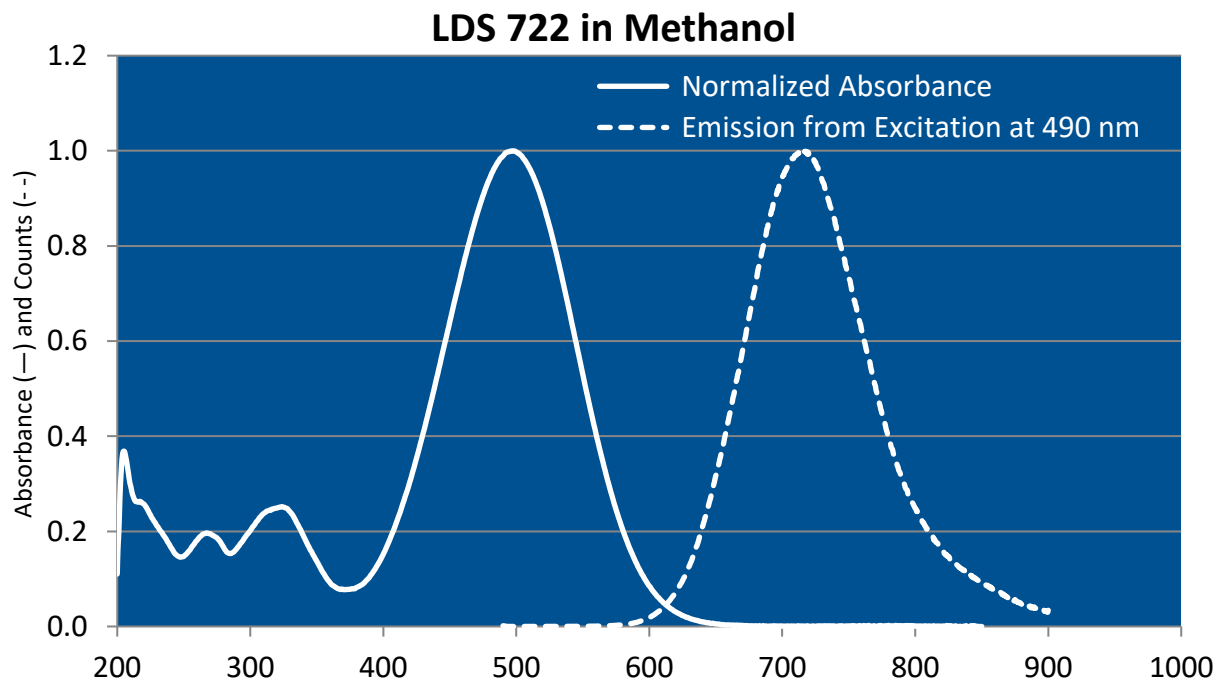
Structure:



Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
715	686-795	Nd:YAG(532) ^{127c}	Methanol		494 ^m	702 ^m
718	691-751	Nd:YAG(532) ²³⁹	Ethanol	6.6 x 10 ⁻⁴		
722	685-760	Nd:YAG(532) ⁵⁷	Methanol			
724		Nd:YAG(532)→F548(544) ¹⁴⁸	Methanol	3.4 x 10 ⁻⁴ (osc), 1.3 x 10 ⁻⁴ (amp)		
735	700-780	N ₂ (DFDL) ¹⁶²	DMSO	7 x 10 ⁻³		
713	680-795	Ar(458-514) ²⁰⁶	PC/EG,2/8	4 x 10 ^{-3*}		
725	690-770	Ar(Blue/Green,SF) ⁶⁸	PC/EG	2.7 x 10 ⁻³		
726	688-775	Ar(Blue/Green,bb) ⁶⁸	PC/EG			
745	685-800	Ar(Blue/Green,SF) ⁶⁸	PC/EG	2.7 x 10 ⁻³		
747	682-810	Ar(Blue/Green,bb) ⁶⁸	PC/EG			
722	687-755	Cu(511,578) ¹⁷⁵	Methanol	2.6 x 10 ⁻³		

* This represents a maximum value. Concentration should be adjusted to 80-85% absorption of the pump light.

m = methanol, DMSO = dimethylsulfoxide, EG = ethylene glycol, PC = propylene carbonate



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		Methanol	79 ±6ps	S-3
	700		PMMA	111 ±9ps	S-3

REFERENCES:

57. Quanta-Ray, Note: Quanta-Ray is now incorporated as a part of Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039
68. Coherent Inc., 3210 Porter Dr., Palo Alto, CA 94304
127. **a.** Cw Operation of Laser Dyes Styryl-9 and Styryl-11, J. Hoffnagle, L. Ph. Roesch, N. Schlumpf and A. Weis, *Optics Commun.*, 42, 267 (1982); **b.** K. Kato, see Reference 5 in 127 **a** ; **c.** K. Kato, unpublished results
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)
162. Novel Method for Wavelength Tuning of Distributed Feedback Dye Lasers, J. Jasny, *Optics Commun.*, 53(4), 238 (1985)
175. CVL-Pumped Dye Laser For Spectroscopic Application, M. Broyer, J. Chevalere, G. Delacretaz and L. Wöste, *App. Phys. B*, 35, 31 (1984)
206. Coherent Inc., 3210 Porter Dr., Palo Alto, CA 94304; (599 Composite Tuning Curves, 1992; The concentration shown represents a maximum value. The final concentration should be adjusted to obtain 80-85% absorption of the pump light.)
239. P. Jauernik, private commun., Sirah Laser- und Plasmatechnik, 2003.
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For a current list of biology, biological stain, or biochemistry references for LDS 722 from PubMed, click on the following link:

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