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## LDS 722

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

**Catalog No.:** 07220

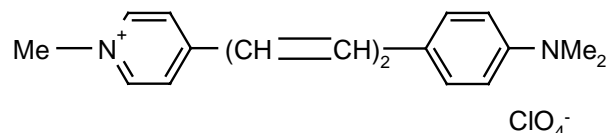
**CAS No.:** 89846-21-9

**Chemical Formula:** C<sub>19</sub>H<sub>23</sub>N<sub>2</sub>.ClO<sub>4</sub>

**MW:** 378.86

**Appearance:** Purple crystals

**Structure:**



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

\* 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

### REFERENCES:

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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. Chevaleyre, 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.

For a current list of biology, biological stain, or biochemistry references for LDS 722 from PubMed, click on the following link:

[LDS 722 or Pyridine 2](#)