

## LDS 925

**Synonym:** 2-[p-dimethylaminophenyl]-2,4-neopentylene-1,3,5,7-octatetraenyl]-3-ethyl-(6,7-benzo)-benzothiazolium perchlorate; Styryl 13

**Catalog No.:** 09250

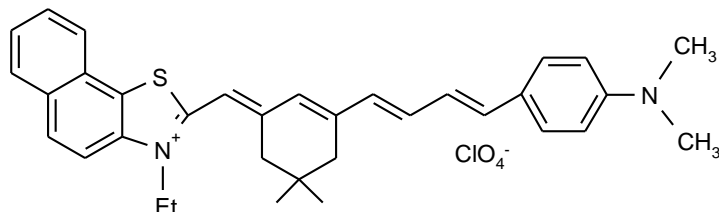
**CAS No.:** 94507-05-8

**MW:** 605.18

**Chemical Formula:** C<sub>34</sub>H<sub>37</sub>ClN<sub>2</sub>O<sub>4</sub>S

**Appearance:** Green crystals

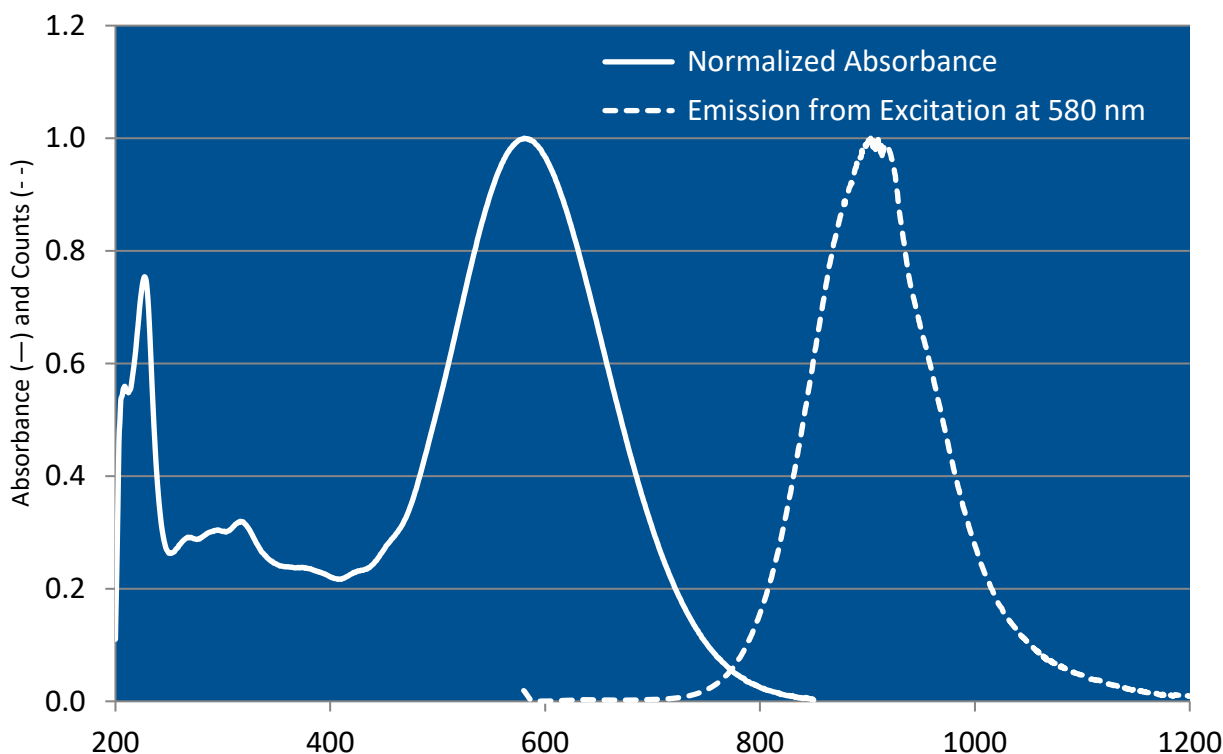
**Structure:**



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max
960	902-1023	XeCl(308) <sup>165</sup>	DMSO	1.16 x 10 <sup>-3</sup> (osc), 3.8 x 10 <sup>-4</sup> (amp)	581 <sup>s</sup> 585pc/eg, 1/3
960	920-1000	XeCl(308) <sup>204</sup>	DMSO	8.3 x 10 <sup>-4</sup> (osc), 6.2 x 10 <sup>-4</sup> (amp)	
955	870-1020	Nd:YAG(m-l,532) <sup>164</sup>	PC/EG,15/85	2 x 10 <sup>-3</sup>	
975	930-1040	Nd:YAG(m-l,532) <sup>164</sup>	PC/EG,15/85	2 x 10 <sup>-3</sup>	
930/960	890-980	Nd:YAG(532) <sup>163</sup>	Methanol	2.3 x 10 <sup>-4</sup> (osc), 2.9 x 10 <sup>-5</sup> (amp)	
925	875-1050	Ar <sup>145</sup>	PC/EG,15/85	2 x 10 <sup>-3</sup>	
930	880-1030	Ar <sup>17</sup>	PC/EG,15/85		
957	924-1030	Ar <sup>166</sup>	PC/EG,15/85	2 x 10 <sup>-3</sup>	

DMSO = dimethylsulfoxide, EG = ethylene glycol; PC = propylene carbonate, s = DMSO

### LDS 925 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
576	~969	0.11	Methanol		

Song-Yong Ju, et.al., Science 323(16),1319 (2009)

#### REFERENCES:

- 17. Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039
- 145. Ar-Ion-Laser-Pumped Infrared Dye Laser at 875-1084nm, K. Kato, *Optics Lett.*, 9(12), 544 (1984)
- 163. M. Yeganeh and A.G. Yodh, Ph.D. Thesis, University of Pennsylvania, private commun., 1992; (Quanta Ray Dye Laser; Good Operating Range, 910nm-960nm)
- 164. Synchronous and Hybrid Mode-Locking of a Styryl 13 Dye Laser, T.S. Stark, M.D. Dawson and A.L. Smirl, *Optics Commun.*, 68(5), 361 (1988)
- 165. Excimer-Laser Pumped IR Dye Laser at 907-1023nm, L. Bloomfield, *Optics Commun.*, 70(3), 223 (1989)
- 166. F.B. Dunning and G. Lynn, Rice U., private commun., 1988
- 204. Questek, Inc., 44 Manning Road, Billerica, MA 01821 (Tuning Curves for Model 5200B Dye Laser, PDL-3)

For a current list of biology, biological stain, or biochemistry references for LDS 925 from PubMed, click on the following link:

[LDS 925](#)