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LD 390

Synonym: 7-(dimethylamino)-4-methoxy-1-methyl-1,8-naphthyridin- 2(1H)-one; Quinolon 390

Catalog No.: 03900

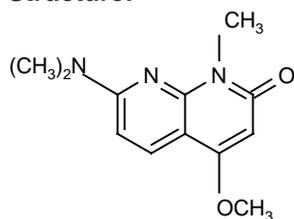
CAS No.: 57980-10-6

Chemical Name: C₁₂H₁₅N₃O₂

MW: 233.27

Appearance: White crystalline powder

Structure:



| Lasing Wavelength Max. (nm) | Range (nm) | Pump Source (nm) | Solvent | Concentration (molar) | Abs λ-max | FI λ-max |
|-----------------------------------|---------------|-------------------------------------|----------|--|------------------|------------------|
| | 389-397 | FL ⁸ | Methanol | | 355 ^m | 386 ^m |
| 391 | 388-395 | FL ⁸ | Ethanol | | 355 ^e | |
| 394 | 383-408 | FL ⁶⁹ | Methanol | | | |
| 389 | 378-398 | Nd:YAG(355) ⁸⁶ | Ethanol | 1.6 x 10 ⁻³ (osc), 2.4 x 10 ⁻⁴ (amp) | | |
| 390 | 383-396 | Nd:YAG(355) ⁵⁷ | Methanol | 1.1 x 10 ⁻³ (osc), 2.6 x 10 ⁻⁴ (amp) | | |
| 389 | 381-401 | N ₂ (337) ¹³⁹ | Methanol | 1.5 x 10 ⁻³ | | |
| 404 | -400-420- | N ₂ (337) ¹³⁹ | Methanol | 1.5 x 10 ⁻³ (LD390)+ 4.5 x 10 ⁻⁴ (S420) | | |

e = ethanol; m = methanol

S420 = Stilbene 420

REFERENCES:

- Near-Ultraviolet Lasing Dyes, Part 1: Search for New Dyes and Summation of Results, P.R. Hammond, A.N. Fletcher, R.A. Henry, R.L. Atkins and D.W. Moore; and Near-Ultraviolet Lasing Dyes, Part 2: Effects of Coaxial Flashlamp Excitation, A.N. Fletcher, *NWC TP 5768* (1975); Laser Dye Stability, Part 3: Bicyclic Dyes in Ethanol, A.N. Fletcher, *Appl. Phys.*, 14, 295 (1977); Laser Dye Stability, Part 5: Effect of Chemical Substituents of Bicyclic Dyes Upon Photodegradation Parameters, A.N. Fletcher and D.E. Bliss, *Appl. Phys.*, 16, 289 (1978)
- Quanta-Ray, Note: Quanta-Ray is now incorporated as a part of Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039
- Candela Laser Corporation, 530 Boston Post Road, Wayland, MA 01778-1833
- L. Johnson and G. Holtom, private commun., 1981
- Nitrogen Pumping LD390 and a mixture of LD390 and S420, J.P. Young, private commun., 1983

For a current list of biology, biological stain, or biochemistry references for LD 390 from PubMed, click on the following link:

[LD 390](#) (zero references as of May 2006)