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p-TERPHENYL

Synonym: 1,1':4'1"-terphenyl; PTP

Catalog No.: 03400

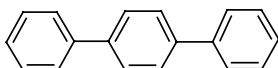
CAS No.: 92-94-4

MW: 230.31

Chemical Formula: C₁₈H₁₄

Appearance: White crystals

Structure:



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
341	335-355	FL ³	DMF	1 x 10 ⁻⁴	276 ^c	339 ^c
337		KrF(248) ⁴⁴	Cyclohexane	1.25 x 10 ⁻³		335 ^t
338	326-358	KrF(248) ⁴³				
338		KrF(248) ⁴⁴	Ethanol	1 x 10 ⁻³		
339	322-336	KrF(248) ⁸⁵	Cyclohexane	1.1 x 10 ⁻³		
340	323-364	KrF(249) ¹	Cyclohexane	5 x 10 ⁻³		
340		KrF(248) ^{45,46}	p-Dioxane			
339	334-345	XeCl(308) ¹¹⁰	p-Dioxane	5 x 10 ⁻⁴		
340		XeCl(308) ¹¹²	Cyclohexane	2 x 10 ⁻³		
340	335-346	XeCl(308) ¹¹⁴	Cyclohexane	5.6 x 10 ⁻³		
341	334-347	XeCl(308) ¹¹⁸	Cyclohexane	4 x 10 ⁻³ (osc)		
341	334-350	XeCl(308) ²⁰⁴	p-Dioxane	1.6 x 10 ⁻³ (osc), 1.4 x 10 ⁻³ (amp)		
342	335-349	XeCl(308) ¹¹⁰	p-Dioxane	1 x 10 ⁻³		
342	336-349	XeCl(308) ¹¹⁴	Toluene/ethanol,4/6	3 x 10 ⁻³		
342	336-355	XeCl(308) ¹¹⁴	p-Dioxane	2 x 10 ⁻³		
343		XeCl(308) ¹¹⁵	p-Dioxane	2 x 10 ⁻³		
340	333-348	Nd:YAG(266) ⁸¹	Cyclohexane	2 x 10 ⁻³ (osc), 5 x 10 ⁻⁴ (amp)		

c = cyclohexane; t = toluene

REFERENCES:

1. Efficient Laser Emission in Para-terphenyl Tunable Between 323 and 364 nm, B. Godard and O. de Witte, *Optics Commun.*, 19(3), 325 (1976)
3. Phase-R Corporation, Box G-2 Old Bay Rd., New Durham, NH 03855
43. Tunable, Narrow Bandwidth, 2 MW Dye Laser Pumped by a KrF* Discharge Laser, V.I. Tomin, A.J. Alcock, W.J. Sarjeant and K.E. Leopold, *Optics Commun.*, 28(3), 336 (1979)
44. Some Characteristics of Efficient Dye Laser Emission Obtained By Pumping at 248 nm with a High-Power KrF* Discharge Laser, V.I. Tomin, A.J. Alcock, W.J. Sarjeant, and K.E. Leopold, *Optics Commun.*, 26(3), 396 (1978)
45. Tunable, Coherent Radiation in the Lyman-αRegion [1210-1290Å] using Magnesium Vapor, T.J. McKee, B.P. Stoicheff, and S.C. Wallace, *Optics Lett.*, 3(6), 207 (1978)
46. Characterization of Dye Laser Pumping Using a High-Power KrF Excimer Laser at 248 nm, T.J. McKee, and D.J. James, to be published September 1979 in *Canadian J. Physics*
81. Tuning Ranges of 266 nm Pumped Dyes in the Near UV, L.D. Ziegler and B.S. Hudson, *Optics Commun.*, 32(1), 119 (1980)



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- 85. Shorter Dye Laser Wavelengths from Substituted p-Terphenyls, W. Zapka and U. Brockmann, *Appl. Phys.* 20, 283 (1979)
- 110. Lumonics Inc., 105 Schneider Road, Kanata, (Ottawa), Ontario, Canada K2K 1Y3
- 112. Efficient Dye Lasers Pumped by an XeCl Excimer Laser, O. Uchino, T. Mizunami, M. Maeda and Y. Miyazoe, *Appl. Phys.*, 19, 35 (1979)
- 114. Optimization of Spectral Coverage in an Eight-Cell Oscillator-Amplifier Dye Laser Pumped at 308nm, F. Bos, *Appl. Optics*, 20, 3553 (1981)
- 115. Solvent Dependent Characteristics of XeCl-Pumped UV Dye Lasers, P. Cassard, P.B. Corkum and A.J. Alcock, *Appl. Phys.*, 25, 17 (1981)
- 118. The XeCl Excimer Laser: A Powerful and Efficient UV Pumping Source for Tunable Dye Lasers, H. Telle, W. Huffer and D. Basting, *Optics Commun.*, 38(5,6), 402 (1981)
- 204. Questek, Inc., 44 Manning Road, Billerica, MA 01821 (Tuning Curves for Model 5200B Dye Laser, PDL-3)

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