

p-QUATERPHENYL

Synonym: 1,1':4',1'':4'',1'''-quaterphenyl; PQP

Catalog No.: 03740

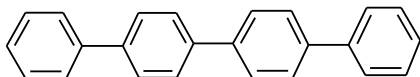
CAS No.: 135-70-6

MW: 306.41

Chemical Formula: C₂₄H₁₈

Appearance: White crystals

Structure:

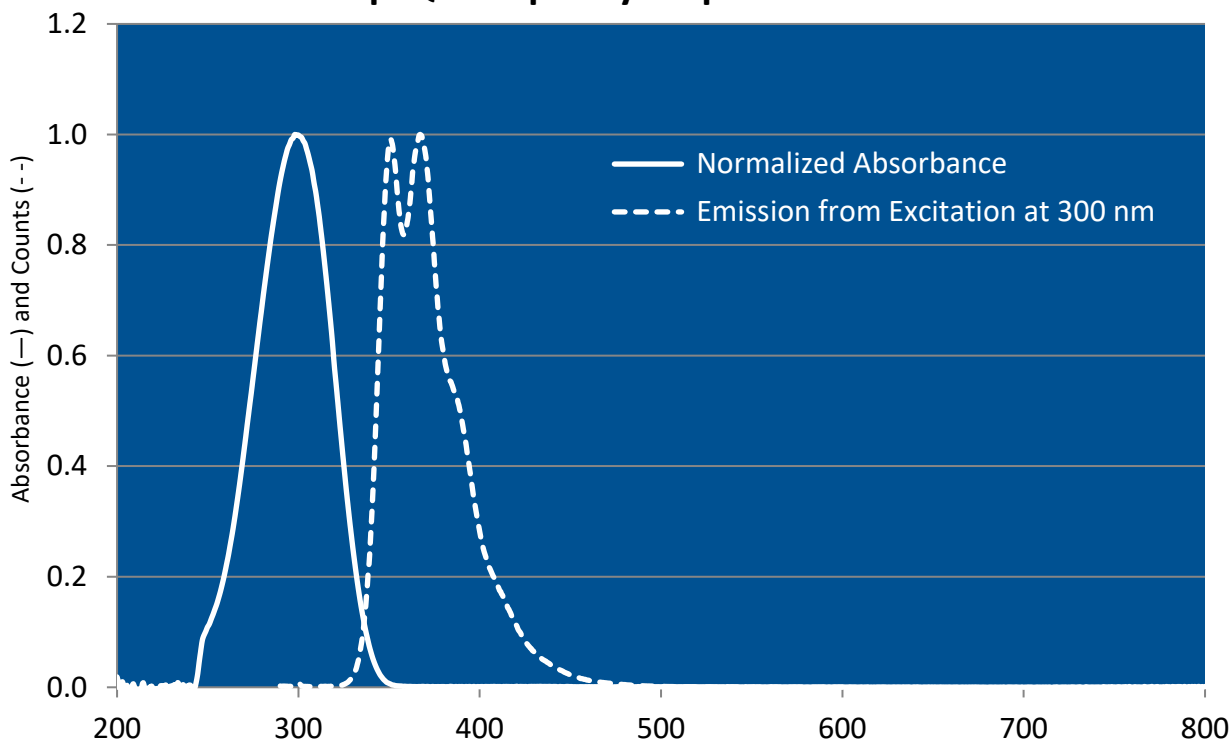


Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
374		FL ²	DMF	7 x 10 ⁻³	294 ^c	365 ^c
	371-376	FL ⁸	DMF		297 ^t	
	362-390	N ₂ (337) ⁶	Toluene			

c = cyclohexane, t = toluene

p-Quaterphenyl in p-Dioxane



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
294	365.6	0.89	Cyclohexane	0.8	Berlman, p238
	365		Ethanol	0.8	C-3

REFERENCES:

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8. 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)
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Berlman. Isadore B. Berlman, *Handbook of Fluorescence Spectra of Aromatic Molecules*, 2nd Edition (New York and London, Academic, 1971), <https://www.elsevier.com/books/handbook-of-florescence-spectra-of-aromatic-molecules/berlman/978-0-12-092656-5>

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

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