

PBBO

Synonym: 2-[1,1'-biphenyl]-4-yl-6-phenyl-benzoxazole

Catalog No.: 04001

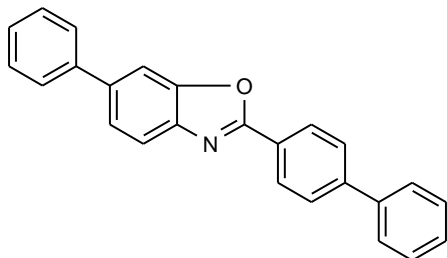
CAS No.: 17064-47-0

Chemical Formula: C₂₅H₁₇NO

MW: 347.40

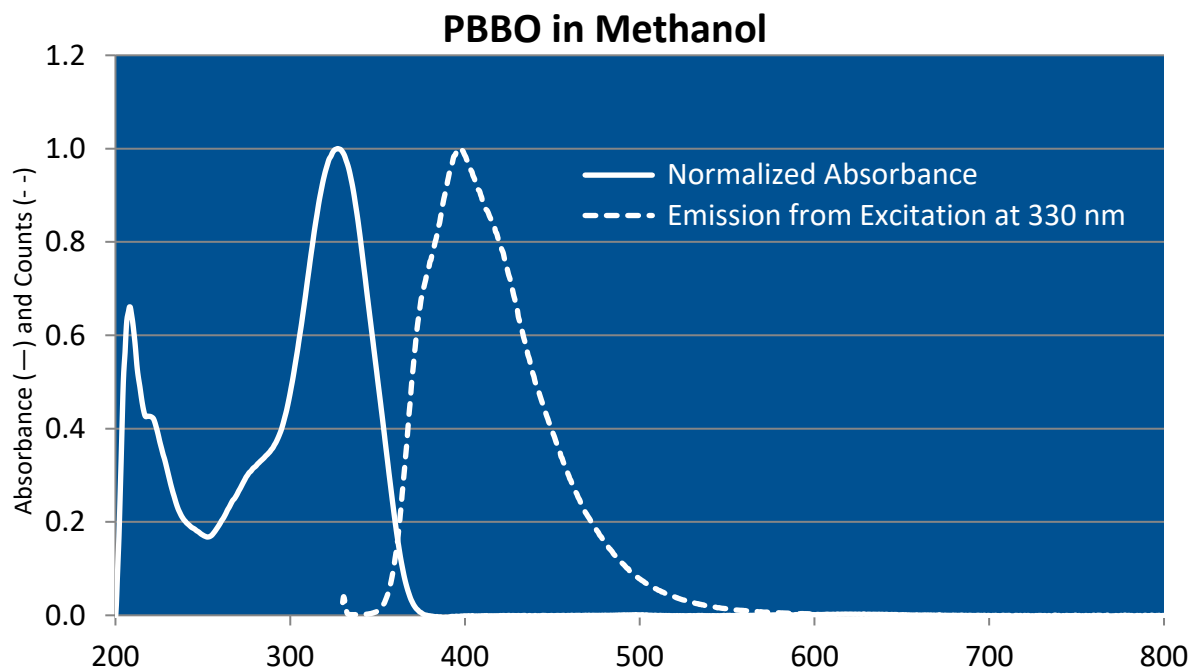
Appearance: White crystal

Structure:



Max. Lasing Wavelength (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
392	378-413	XeCl(308) ¹¹⁴	Toluene/ethanol,4/6	4 x 10 ⁻⁴ (PBBO), 3.1 x 10 ⁻⁴ (BBQ)	331 ^p	395 ^t
396	386-420	XeCl(308) ¹¹⁴	p-Dioxane	1.2 x 10 ⁻³		
399	389-419	XeCl(308) ¹¹⁴	Toluene/ethanol,4/6	1.1 x 10 ⁻³		
395	380-430	N ₂ (337) ¹⁸³	p-Dioxane	3 x 10 ⁻³		
396	378-440	N ₂ (337) ⁹⁰	Toluene/ethanol,7/3	3 x 10 ⁻³		
396	388-417	N ₂ (337) ¹¹⁴	p-Dioxane	2.3 x 10 ⁻³		
400	391-411	N ₂ (337) ⁵	Toluene/ethanol,7/3	5 x 10 ⁻⁴		

p = p-dioxane; t = toluene



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
	395		p-Dioxane	1.2	C-3

REFERENCES:

- 5. Laser Photonics, Inc., 12351 Research Parkway, Orlando, FL 32826, formerly, Molelectron Corporation and Cooper LaserSonics, Inc.
- 90. Jobin Yvon, 16-18 rue du Canal B.P. 118, 91163 Longjumeau Cedex France
- 114. Optimization of Spectral Coverage in an Eight-Cell Oscillator-Amplifier Dye Laser Pumped at 308nm, F. Bos, *Appl. Optics*, 20, 3553 (1981)
- 183. Laser Science, Inc., 26 Landsdowne Street, Cambridge, MA 02139
- C-3. Photoquenching Parameters for Commonly Used Laser Dyes, S. Speiser and N. Shakkour, *Appl. Phys. B* 38, 191 (1985), <https://doi.org/10.1007/BF00697483>

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

[PBBO](#) (zero references in PubMed as of May 2006)