

PBD

Synonym: 2-[1,1'-biphenyl]-4-yl-5-phenyl-1,3,4-oxadiazole

Catalog No.: 03660

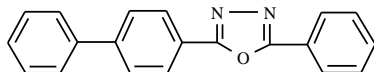
CAS No.: 852-38-0

MW: 298.33

Chemical Formula: C₂₀H₁₄N₂O

Appearance: White crystalline powder

Structure:

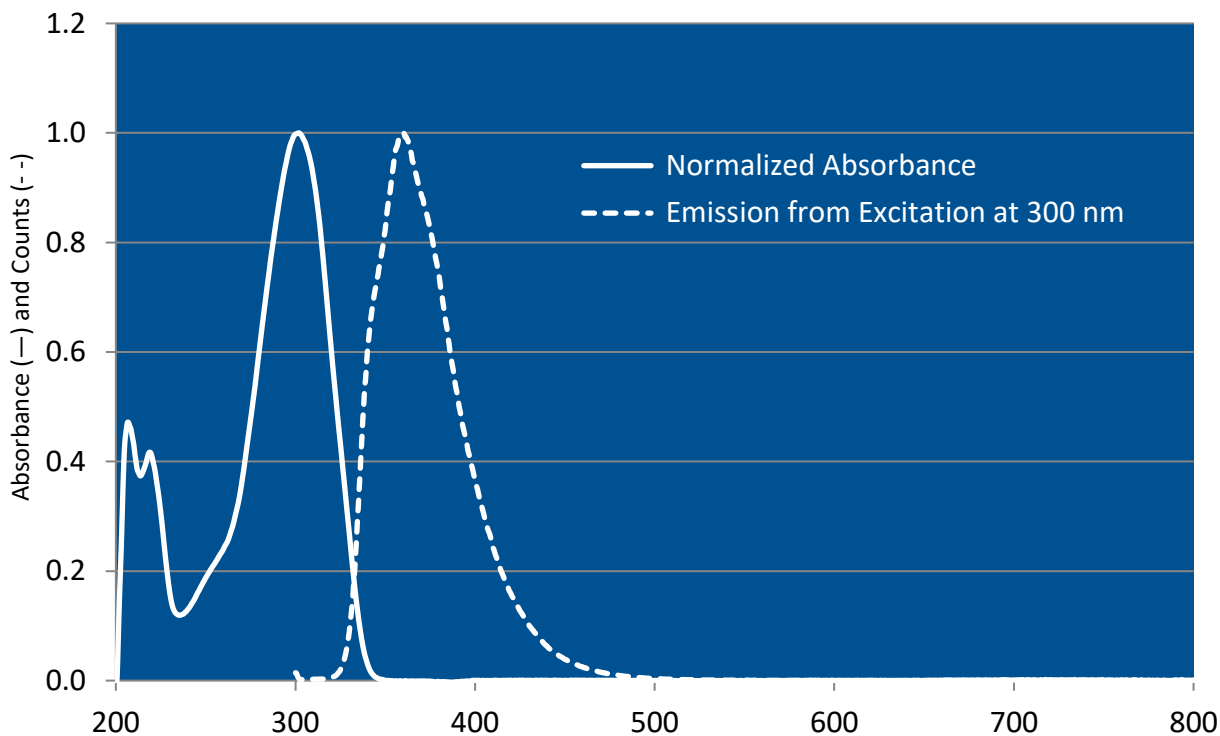


Lasing Wavelength

Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
363		FL ²	Ethanol	0.1 of saturation	302 ^e	362 ^e
355		KrF(248) ⁴⁴	Cyclohexane	5 x 10 ⁻³		
356	350-378	KrF(248) ⁴³				
358	353-379	XeCl(308) ¹¹⁴	Cyclohexane	1 x 10 ⁻³		
360	353-381	XeCl(308) ¹¹⁴	p-Dioxane	8 x 10 ⁻⁴		
363		XeCl(308) ¹¹²	Ethanol	5 x 10 ⁻⁴		
367	358-386	XeCl(308) ¹¹⁰	Toluene/ethanol, 1/1	4 x 10 ⁻⁴		
	357-388	N ₂ (337) ⁴	Toluene	7 x 10 ⁻³		
362	354-364	N ₂ (337) ¹¹⁴	p-Dioxane	4 x 10 ⁻³		
365	357-390	N ₂ (337) ¹¹⁴	Toluene/ethanol, 7/3	4 x 10 ⁻³		
366	360-386	N ₂ (337) ⁵	Toluene/ethanol, 1/1	5 x 10 ⁻³		

e = ethanol

PBD 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
	357	0.83	Cyclohexane	1	Berlman, p306
	361		Ethanol	1.1	Berlman, p307

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

[PBD](#) (this abbreviation has multiple definitions in PubMed)