

## PPO

**Synonym:** 2,5-diphenyl-oxazole

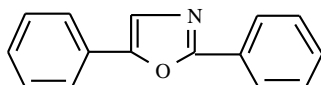
**Catalog No.:** 03720

**CAS No.:** 92-71-7

**Chemical Formula:** C<sub>15</sub>H<sub>11</sub>NO

**Appearance:** White powder

**Structure:**

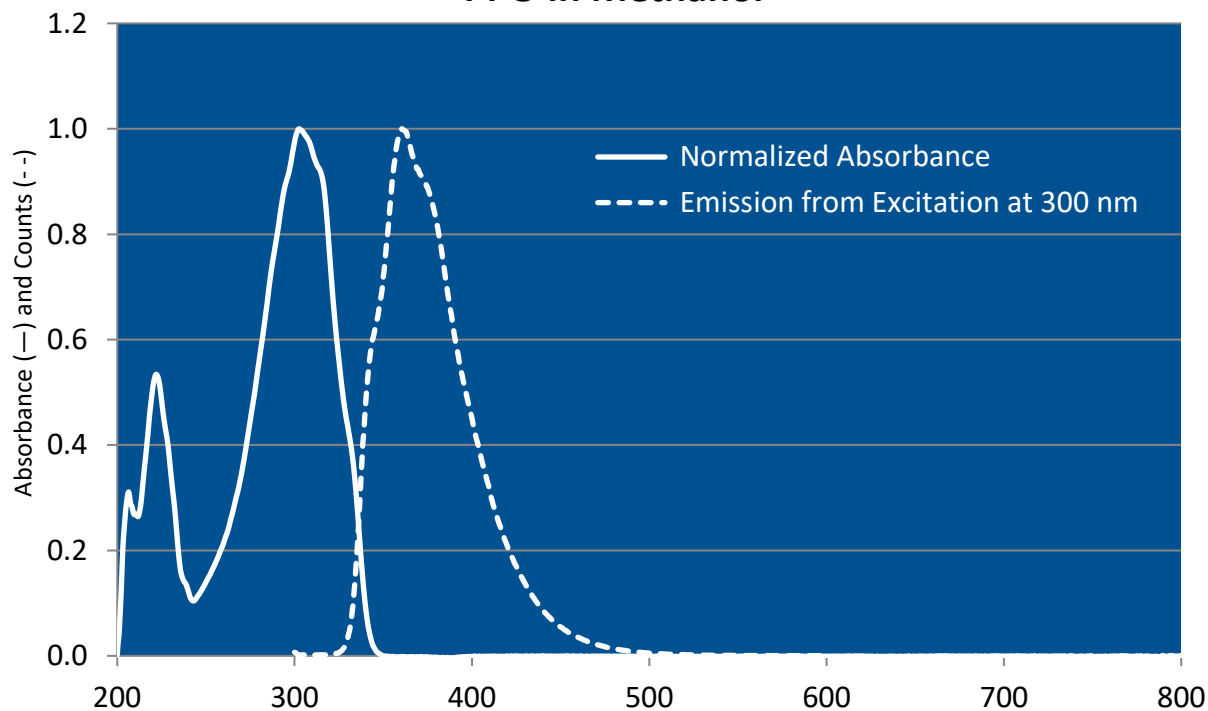


**MW:** 221.26

Max. Lasing Wavelength (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
381		FL <sup>2</sup>	p-Dioxane	7 x 10 <sup>-3</sup>	303 <sup>e</sup>	361 <sup>e</sup>
372		KrF(248) <sup>44</sup>	Cyclohexane	1 x 10 <sup>-3</sup>		
377		XeCl(308) <sup>114</sup>	Methanol			
378		XeCl(308) <sup>115</sup>	Cyclohexane	1 x 10 <sup>-3</sup>		
375	368-382	Nd:YAG(266) <sup>81</sup>	Cyclohexane	5 x 10 <sup>-3</sup> (osc), 1.25 x 10 <sup>-3</sup> (amp)		
365/380	359-391	N <sub>2</sub> (337) <sup>4</sup>	Toluene	6 x 10 <sup>-3</sup>		
378		N <sub>2</sub> (337) <sup>114</sup>	p-Dioxane	1.8 x 10 <sup>-3</sup>		

e = ethanol

### PPO 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	1	Cyclohexane	1.4	Berlman
	~391	0.94	Ethanol	2.06	Berlman

#### REFERENCES:

2. Ultraviolet Organic Liquid Lasers, H.W. Furumoto and H.L. Ceccon, *IEEE J. Quantum Electron.*, QE6, 262 (1970)
  4. The Efficient Generation of Tunable Near UV Radiation Using an N<sub>2</sub> Pumped Dye Laser, F.B. Dunning and R.F. Stebbings, *Optics Commun.*, 11(2), 112 (1974)
  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)
  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)
  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)
- 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 PPO from PubMed, click on the following link:

[PPO](#) (this abbreviation has multiple definitions in PubMed; fewer results may be obtained by combining with the term "dye")