

Bis-MSB

Synonym: 1,4-bis[2-(2-methylphenyl)ethenyl]-benzene

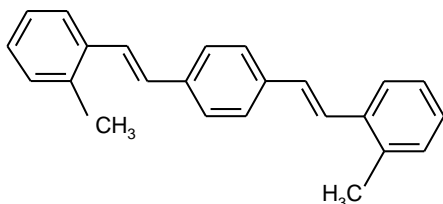
Catalog No.: 04210

CAS No.: 13280-61-0

Molecular Weight: 310.44

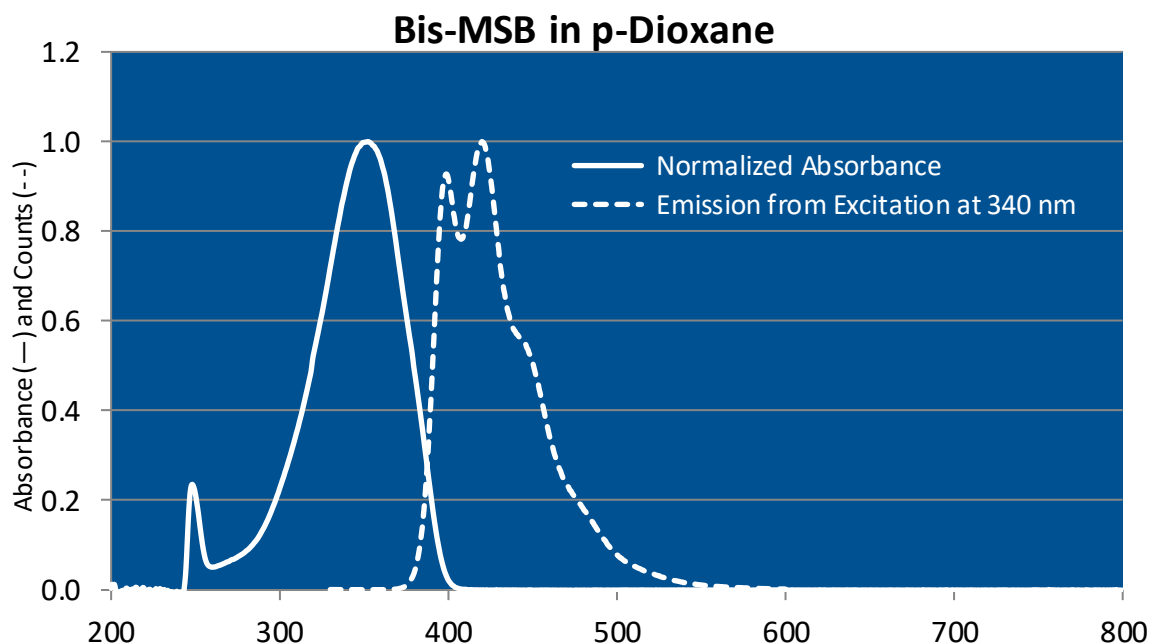
Appearance: Greenish yellow solid

Structure:



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ -max	FI λ -max
424		FL ⁷	Toluene	4×10^{-4}	347 ^c	420 ^c
420	404-437	XeCl(308) ²⁰⁴	p-Dioxane	7.5×10^{-4} (osc), 6.3×10^{-4} (amp)	347 ^e	418 ^e
421	411-431	XeCl(308) ¹¹⁰	p-Dioxane	1×10^{-3}		
422		XeCl(308) ¹¹²	p-Dioxane	1×10^{-3}		
423	413-428	XeF(351) ¹⁵⁴	p-Dioxane	1.2×10^{-3}		
422	410-430	Nd:YAG(355) ⁸⁰	p-Dioxane	1×10^{-3}		
421	411-430	N ₂ (337) ⁵	p-Dioxane	1.2×10^{-3}		

c = cyclohexane; e = ethanol



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
	418		p-Dioxane	1.3	C-3
~345	422	0.94	Cyclohexane	1.35	Berlman, 327

REFERENCES:

5. Laser Photonics, Inc., 12351 Research Parkway, Orlando, FL 32826, formerly, Molelectron Corporation and Cooper LaserSonics, Inc.
 7. Flashlamp Pumped Organic Scintillator Lasers, H.W. Furumoto and H.L. Ceccon, *J. Appl. Phys.*, 40, 4204 (1969)
 80. A Tunable Picosecond UV Dye Laser Pumped by the Third Harmonic of a Neodymium-Doped YAG Laser, K. Azuma, O. Nakagawa, Y. Segawa, Y. Aoyagi and S. Namba, *Jpn. J. Appl. Phys.*, 18(1), 209 (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)
 154. Dye Laser Radiation in the 370-760nm Region Pumped by a XeF Excimer Laser, T.C. Eschrich and T.J. Morgan, *Applied Optics*, 24(7), 937 (1985)
 204. Questek, Inc., 44 Manning Road, Billerica, MA 01821 (Tuning Curves for Model 5200B Dye Laser, PDL-3)
 - 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>
- 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-fluorescence-spectra-of-aromatic-molecules/berlman/978-0-12-092656-5>

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

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