

COUMARIN 440

Synonym: 7-amino-4-methyl-2H-1-benzopyran-2-one; Coumarin 120

Catalog No.: 04400

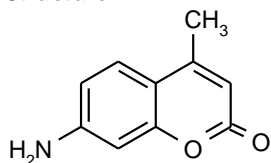
CAS No.: 26093-31-2

MW: 175.15

Chemical No.: C₁₀H₉NO₂

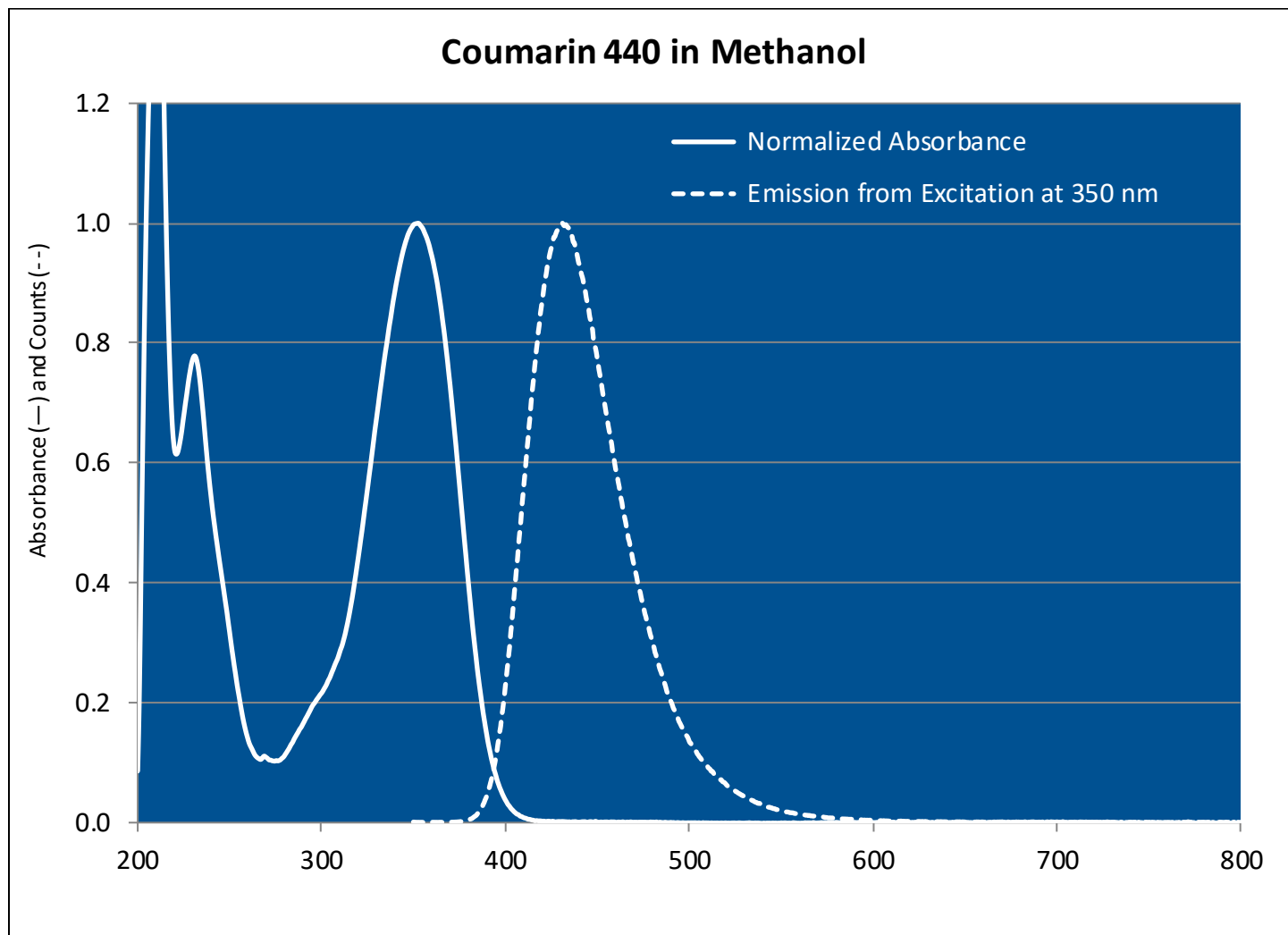
Appearance: Light yellow crystalline solid

Structure:



Lasing Wavelength Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
440	419-469	FL ¹¹	Methanol	2 x 10 ⁻⁴	354 ^e	430 ^e
440	423-462	FL ³	Ethanol	3 x 10 ⁻⁴	351 ^m	
442	425-443	FL ³	Methanol	3 x 10 ⁻⁴		
442	435-455	FL ¹²	MeOH/H ₂ O,1/1	2.8 x 10 ⁻⁴		
453		FL ⁶⁰	H ₂ O	2.8 x 10 ⁻⁴		
435	418-460	XeCl(308) ¹¹⁴	p-Dioxane/EtOH,7/3	3.4 x 10 ⁻³		
436		XeCl(308) ¹¹²	Ethanol	4 x 10 ⁻³		
438	422-467	XeCl(308) ¹¹⁴	Methanol	7 x 10 ⁻³		
440	415-472	XeCl(308) ²⁰⁴	Methanol	3.5 x 10 ⁻³ (osc), 3 x 10 ⁻³ (amp)		
440	425-464	XeCl(308) ¹¹⁰	Ethanol	2.5 x 10 ⁻³		
442	431-459	XeCl(308) ¹¹⁰	Methanol	2 x 10 ⁻³		
437	422-465	XeF(351) ¹⁵⁴	Ethanol	5 x 10 ⁻³		
435	422-459	Nd:YAG(355) ¹¹⁰	Methanol	4 x 10 ⁻⁴		
440	424-458	Nd:YAG(355) ⁵⁷	Methanol	1.7 x 10 ⁻³ (osc), 3.4 x 10 ⁻⁴ (amp)		
441		Nd:YAG(355) ⁵⁹	Ethanol	7 x 10 ⁻⁴		
441	429-460	Nd:YAG(355) ²³⁹	Ethanol	1.4 x 10 ⁻³		
443	427-464	Nd:YAG(355) ⁵³	Methanol	1.4 x 10 ⁻³ (osc), 5.7 x 10 ⁻⁴ (amp)		
435	410-480	N ₂ (337) ¹⁸³	Methanol	5 x 10 ⁻³		
437	417-473	N ₂ (337) ¹¹⁴	Ethanol	2.3 x 10 ⁻³		
437	420-457	N ₂ (337) ⁵	Ethanol	5 x 10 ⁻³		
438	419-466	N ₂ (337) ¹⁰	Ethanol	3 x 10 ⁻³		
439	416-473	N ₂ (337) ⁹⁰	Ethanol	6.1 x 10 ⁻³		
445	420-475	N ₂ (337) ¹⁸³	Methanol	17.5mg/20ml		
450	420-470	Ar(351/364) ¹³	20% aq.DPA + COT	1 x 10 ⁻³		
450	427-477	Ar(cw) ¹⁴	EG			

MeOH/H₂O=methanol/water, EtOH=ethanol, DPA=N, N-dipropylacetamide, COT=cyclooctatetraene, EG=ethylene glycol, e=ethanol, m=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
354		0.72	Ethanol		C-5

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