

DCM

Synonym: [2-[2-[4-(dimethylamino)phenyl]ethenyl]-6-methyl-4H-pyran-4-ylidene]-propanedinitrile

Catalog No.: 06490

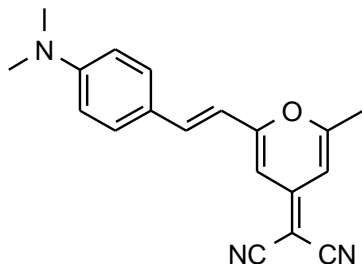
CAS No.: 51325-91-8

Chemical Formula: C₁₉H₁₇N₃O

MW: 303.37

Appearance: Red or orange-red crystals or powder

Structure:

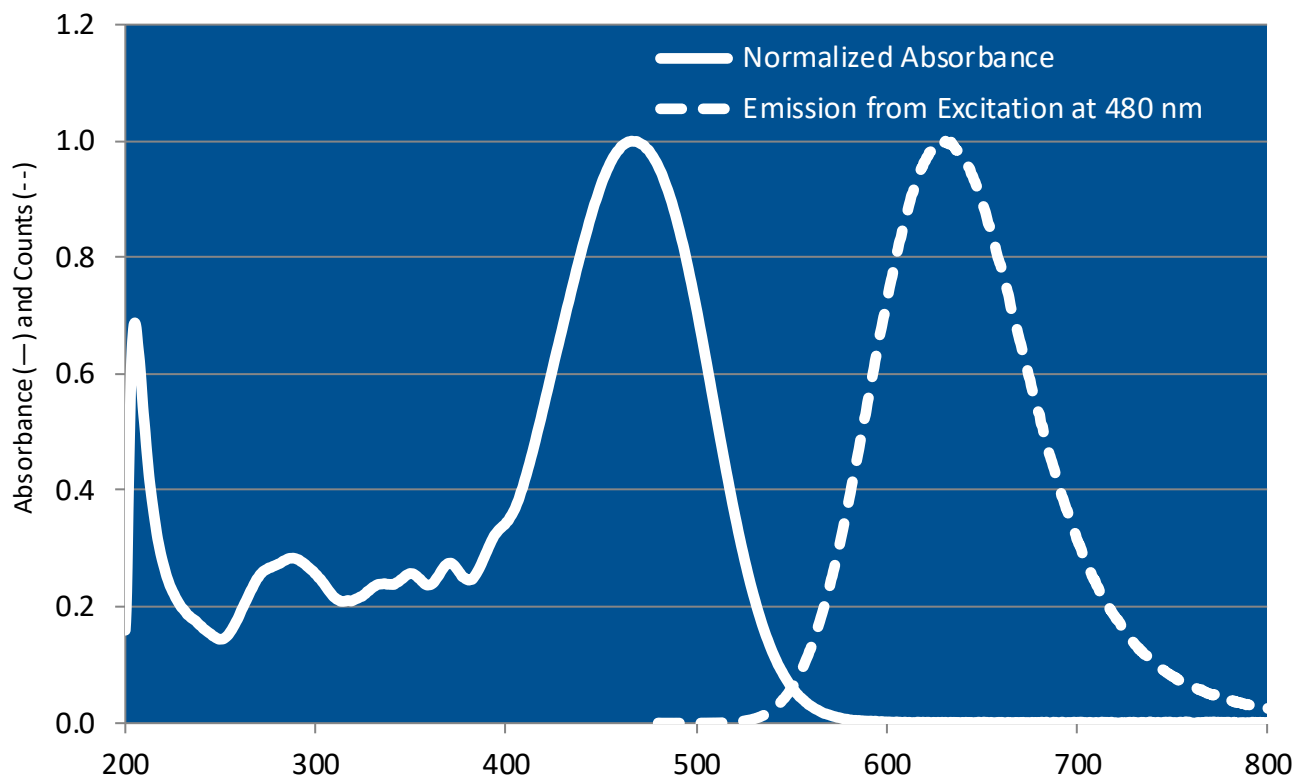


Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	FI λ-max
635	600-677	FL ⁶⁹	Methanol	4 x 10 ⁻⁵	481 ^S	644 ^S
649		FL ⁷³	DMF			
655		FL ⁷³	DMSO			
637	602-686	XeCl(308) ¹¹⁰	Methanol	1 x 10 ⁻³		
643	615-680	XeCl(308) ¹¹⁰	PC/Methanol, 1/4	6 x 10 ⁻⁴		
655	618-713	XeCl(308) ²⁰⁴	DMSO	1.67 x 10 ⁻³ (osc), 1.10 x 10 ⁻³ (amp)		
	-600-642-	Nd:YAG(532) ¹³⁸	MeOH/BzOH	2.2 x 10 ⁻⁴ (R640)+ 3 x 10 ⁻⁴ (DCM)(osc), 2.9 x 10 ⁻⁵ (R640)+ 4 x 10 ⁻⁵ (DCM)(amp)		
606	-594-630-	Nd:YAG(532) ¹⁴⁰	Ethanol	5.5 x 10 ⁻⁴ (SR640)+ 2.7 x 10 ⁻⁵ (DCM)(osc), 5.5 x 10 ⁻⁵ (SR640)(amp)		
610	600-655	Nd:YAG(532) ⁵	EtOH/H ₂ O, 77/23 +DSS(2.3 x 10 ⁻⁴ M)	6.1 x 10 ⁻⁴ (R640), 5.9 x 10 ⁻⁴ (DCM)(osc); 4.6 x 10 ⁻⁵ (R640)(amp)		
627	602-660	Nd:YAG(532) ²³⁹	Ethanol	9.9 x 10 ⁻⁴		
635	607-676	Nd:YAG(532) ⁵³	Methanol	3.3 x 10 ⁻⁴ (osc), 1.1 x 10 ⁻⁴ (amp)		
635	608-660	Nd:YAG(532) ¹⁸⁹	CF ₃ CH ₂ OH	3 x 10 ⁻³		
635	610-660	Nd:YAG(532) ⁵	Ethanol	1.5 x 10 ⁻³ (osc), 1.5 x 10 ⁻³ (pre-amp), 1.4 x 10 ⁻⁴ (amp)		
640	571-662	Nd:YAG(532) ¹³⁴	Methanol			
640	610-675	Nd:YAG(532) ¹⁴³	MeOH(osc), MeOH(amp)	5.8 x 10 ⁻⁴ (osc), 7.9 x 10 ⁻⁵ (amp)		
640	605-672	Nd:YAG(end-p,532) ⁵⁷	Methanol	5.8 x 10 ⁻⁴ (osc), 7.9 x 10 ⁻⁵ (amp)		

640	610-675	Nd:YAG(532) ¹⁴³	MeOH(osc), MeOH(amp)	5.8 x 10 ⁻⁴ (osc), 7.9 x 10 ⁻⁵ (amp)
642	605-678	Nd:YAG(532) ²³⁰	Methanol	270mg/L (osc), 90mg/L (amp)
642	611-685	Nd:YAG(532) ¹¹⁰	PC/Methanol, 1/4	5 x 10 ⁻⁴
643	616-678	Nd:YAG(355) ¹¹⁰	PC/Methanol, 1/4	4 x 10 ⁻⁴
645		Nd:YAG(532)→F548(544) ¹⁴⁸	Methanol	6.4 x 10 ⁻⁴ (osc), 9.3 x 10 ⁻⁵ (amp)
650	618-678	Nd:YAG(d,m-l,QS) ¹⁶⁸		
650	624-689	Nd:YAG(532) ¹⁴³	DMSO(osc), MeOH(amp)	5.8 x 10 ⁻⁴ (osc), 7.9 x 10 ⁻⁵ (amp)
651	626-685	Nd:YAG(532) ²³⁹	DMSO	9.9 x 10 ⁻⁴
669	624-686	Nd:YAG(532) ¹³⁴	DMSO	
620	585-670	N ₂ (DFDL) ¹⁶²	Me-THF	5 x 10 ⁻³
630	605-660	N ₂ (337) ¹⁴⁷	DMSO	4.7 x 10 ⁻³ (DCM), 3.4 x 10 ⁻³ (R590)
637	600-695	N ₂ (337) ¹⁵³	DMSO	5.8 x 10 ⁻³
654	601-716	N ₂ (337) ⁷³	DMSO	3.3 x 10 ⁻³
655	620-705	N ₂ (337) ¹⁸³	DMSO	35mg/20ml
670	640-710	N ₂ (DFDL) ¹⁶²	DMSO	7 x 10 ⁻³
636	596-700	Ar(488,514) ^{17,178}	EPH	1.5 x 10 ⁻³
640	600-695	Ar(514) ¹²⁴	BzOH/EG,3/7	2.1 x 10 ⁻³
640	605-680	Ar(m-l,514) ⁸⁹	BzOH/EG	~3 x 10 ⁻³
655	605-725	Ar(488) ¹⁰⁸	BzOH/EG,4/6	1.5 x 10 ⁻³
655	608-727	Ar(457-514) ^{17,108}	BzOH/EG,2/3	1.5 x 10 ⁻³
661	610-709	Ar(Blue/Green) ¹²³	LO/EG/BzOH,15/5/1 + COT	
663	605-690	Ar(C699-21,SF) ²²⁹	EPH	3.3 x 10 ⁻³
640	610-715	Ar(C699-21) ²⁵⁹	EG/BzOH	
644	598-677	Cu(511) ¹⁷⁵	Methanol	2 x 10 ⁻³
649	615-688	Cu(511,578) ²⁸	DMSO	2.6 x 10 ⁻³

BzOH = benzyl alcohol; DMF = dimethylformamide; DSS = dodecyl sodium sulfate; EG = ethylene glycol; EtOH = ethanol; LO = Ammonyx LO; MeOH = methanol; Me-THF = methyltetrahydrofuran; s = dimethylsulfoxide (DMSO);

DCM 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
	560-700	0.435	Ethanol		S-4
		0.8	Dimethylsulfoxide		See DCM-3 reference for Drake, et.al., therein
		0.71	Dimethylsulfoxide		See DCM-3 reference for Hammond, therein
		0.43	Methanol		See DCM-3 reference for Drake, et.al., therein
480	627	0.44	DMSO		See DCM-3 reference for Valeur, et.al., therein Eastman Kodak (EKO)

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For a current list of biology, biological stain, or biochemistry references for DCM from PubMed, click on the following link: [DCM](#) (will return all references containing this abbreviation, consider adding "dye" to your search to limit the results)