



## IR 140

**Synonym:** 5-chloro-2-[2-[3-[(5-chloro-3-ethyl-2(3H)-benzothiazol-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-3-ethyl benzothiazolium perchlorate

**Catalog No.:** 09500

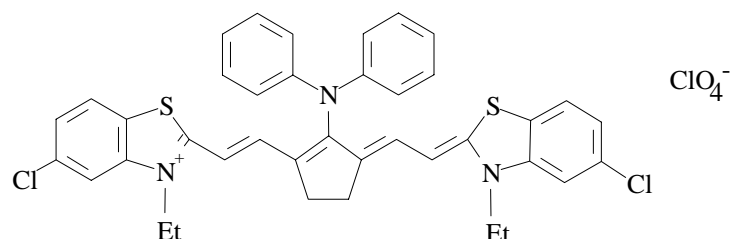
**CAS No.:** 53655-17-7

**Chemical Formula:** C<sub>39</sub>H<sub>34</sub>Cl<sub>2</sub>N<sub>3</sub>S<sub>2</sub>.ClO<sub>4</sub>

**MW:** 779.20

**Appearance:** Brown crystalline powder

**Structure:**



Max. (nm)	Range (nm)	Pump Source (nm)	Solvent	Concentration (molar)	Abs λ-max	Fl λ-max
	805-872	FL→OX720(690-709) <sup>3</sup>	Ethanol	1 x 10 <sup>-4</sup>	823 <sup>s</sup>	882 <sup>s</sup>
	875-916	FL→OX720(709) <sup>3</sup>	DMSO	2 x 10 <sup>-4</sup>	776 <sup>e</sup>	
950		FL <sup>99</sup>	DMSO	1 x 10 <sup>-4</sup>		
880	868-900	XeCl(308) <sup>114</sup>	DMF	3.2 x 10 <sup>-4</sup>		
884	876-912	XeCl(308) <sup>114</sup>	DMF	6.4 x 10 <sup>-4</sup>		
936	900-995	XeCl(308) <sup>110</sup>	DMSO	1 x 10 <sup>-3</sup>		
865	859-872	Nd:YAG(532) <sup>116</sup>	Ethanol/DMSO,94/6	1.5 x 10 <sup>-4</sup> (IR-140), 9.5 x 10 <sup>-4</sup> (R640)		
875	866-882	Nd:YAG(532) <sup>116</sup>	Ethanol/DMSO,94/6	2.8 x 10 <sup>-4</sup> (IR-140), 9.5 x 10 <sup>-4</sup> (R640)		
893	882-913	Nd:YAG <sup>53</sup>	DMSO			
898		Nd:YAG→C720(700) <sup>66</sup>	DMSO	2 x 10 <sup>-4</sup>		
908	Δλ(bb)=15	Nd:YAG(532) <sup>102</sup>	DMSO	4 x 10 <sup>-4</sup>		
910	Δλ(bb)=20	Nd:YAG(532) <sup>101</sup>	DMSO	5 x 10 <sup>-4</sup>		
912	896-940	N <sub>2</sub> (337) <sup>114</sup>	DMSO	1.5 x 10 <sup>-3</sup>		
920	906-968	N <sub>2</sub> (337) <sup>114</sup>	DMSO	3 x 10 <sup>-3</sup>		
930	915-960	N <sub>2</sub> (337) <sup>111</sup>	DMSO	3 x 10 <sup>-3</sup>		
964	906-1018	N <sub>2</sub> (337) <sup>90</sup>	DMSO	1 x 10 <sup>-3</sup>		
	887-986	Kr(752,799) <sup>71</sup>	EG/DMSO,3/1	5.1 x 10 <sup>-4</sup>		
927	858-1030	Kr(752) <sup>100</sup>	EG/DMSO,3/1	1 x 10 <sup>-3</sup>		
950	862-1013	Kr(752,799) <sup>98</sup>	EG/DMSO,1/1	6.4 x 10 <sup>-4</sup>		
961	875-1015	Kr(IR) <sup>68</sup>				
	850-930	Ruby(694) <sup>35</sup>	DMSO			

e = Ethanol; s = DMSO; DMSO = Dimethylsulfoxide; DMF = dimethylformamide; EG = Ethylene Glycol



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### REFERENCES:

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