

Infrared Dye Selector

600nm – 2000nm NIR Absorbing Dyes

The dyes listed below, are arranged in order of increasing wavelength of maximum absorption. Go down the list to find a dye, which has maximum absorption at a wavelength near your wavelength of interest. The Absorptivity reports the relative amount of energy, per unit weight, absorbed at the λ_{Max} by a particular dye. These dyes can be used in many applications including cast acrylics, polycarbonate molding and many inks and coatings. The comments section identifies those dyes which are recommended for either cast acrylic or molded polycarbonate. Please call Adam Gates & Company at +1 908.829.3386 and we will be happy to help you identify the best dye for your application.

λ_{Max} (nm)	Dye Name	Absorptivity	Dye Type	Comments
515	IR Dye 8532	42.8	Anthroquinone	Fluoresces
578	IR Dye 9578	26.58	Anthroquinone	
658	IR Dye 9658	233	Polycyanine	
669	IR Dye 9669	322	Polycyanine	
678	IR Dye 9678	186	Polycyanine	
684	IR Dye 9684	123	Ruby/Diode Laser	
686	IR Dye 6084	73	Ruby/Diode Laser	Contains Vanadium
692	IR Dye 9692	289	Polycyanine	
711	IR Dye 9711	188	Polycyanine	
739	IR Dye 5739	96	Metal Dithiolene	Contains Platinum
740	IR Dye 9740	182	Polycyanine	
757	IR Dye 7151	43.9	Anthroquinone	Contains No Metal
763	IR Dye 7154	41.3	Anthroquinone	Contains No Metal
772	IR Dye 9772	303	Polycyanine	
773	IR Dye 9579	64.8	Metal Dithiolene	
778	IR Dye 9158	59.2	Metal Dithiolene	
780	IR Dye 7036	52.6	Metal Dithiolene	
783	IR Dye 9775	318		
784	IR Dye 9784	239	Polycyanine	
785	IR Dye 2630	50	Metal Dithiolene	
788	IR Dye 5159	54.8	Metal Dithiolene	Contains Platinum
798	IR Dye 9798	157	Polycyanine	
803	IR Dye 5803	77.3	Metal Dithiolene	Contains Platinum
807	IR Dye 9807	280	Polycyanine	
814	IR Dye 9814		Polycyanine	
836	IR Dye 5113	38	Metal Dithiolene	Contains Platinum
838	IR Dye 9131	33	Metal Dithiolene	Contains Platinum
845	IR Dye 9160	48.7	Metal Dithiolene	
850	IR Dye 9850	169	Polycyanine	
858	IR Dye 5630	57	Metal Dithiolene	
859	IR Dye 9859	53	Metal Dithiolene	
863	IR Dye 9619	63.5	Metal Dithiolene	Contains Palladium
863	IR Dye 9863	176	Polycyanine	
886	IR Dye 9194	65.2	Amminium	
889	IR Dye 9129	65.2	Metal Dithiolene	Contains Palladium
895	IR Dye 1116	39	Metal Dithiolene	
905	IR Dye 1420	92	Amminium	

906	IR Dye 2068	92	Amminium	
922	IR Dye 1320	72	Amminium	
923	IR Dye 3138	54.8	Metal Dithiolene	
928	IR Dye 9192	72	Amminium	
929	IR Dye 9153	51.4	Metal Dithiolene	
948	IR Dye 9130	43.5	Metal Dithiolene	
951	IR Dye 9105	58.3	Metal Dithiolene	Contains Palladium
953	IR Dye 1421	27	Amminium	
950	IR Dye 1110	19	Amminium	Suitable for Polycarbonate
953	IR Dye 1111	22	Amminium	Suitable for Polycarbonate
956	IR Dye 1114	20	Amminium	Suitable for Polycarbonate
960	IR Dye 1112	19	Amminium	Contains No Metal
967	IR Dye 2067	71	Amminium	
973	IR Dye 1410	72.8	Amminium	
975	IR Dye 5599	58.3	Metal Dithiolene	Contains Platinum
977	IR Dye 2066	82	Amminium	
990	IR Dye 1310	60	Amminium	
992	IR Dye 9189	66	Amminium	
995	IR Dye 7164	61.3	Amminium	
1026	IR Dye 9117	40	Amminium	
1057	IR Dye 1422	81.4	Amminium	
1073	IR Dye 1120	69	Amminium	
1070	IR Dye 9161	66	Amminium	
1072	IR Dye 9110	55	Dinitrate	
1073	IR Dye 1151	72	Amminium	
1074	IR Dye 1117	73	Amminium	
1078	IR Dye 1122	72	Tetrakis Amminium	Contains No Metal

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Broad Band Absorbing Dyes

λ_{Max} (nm)	Dye Name	Absorptivity	Dye Type	Comments
948	IR Dye 9130	43.5	Metal Dithiolene	
950	IR Dye 1110	19	Tetrakis Amminium	Suitable for Polycarbonate
953	IR Dye 1421	27	Tetrakis Amminium	
953	IR Dye 1111	22	Broadband Absorber	Suitable for Polycarbonate
956	IR Dye 1114	20	Tetrakis Amminium	Suitable for Polycarbonate
960	IR Dye 1112	19	Amminium	Contains No Metal
1073	IR Dye 1120	69	Tetrakis Amminium	
1078	IR Dye 1122	72	Tetrakis Amminium	Contains No Metal