**LDS 698***

**Synonym:** [2-[4-[4-(dimethylamino)phenyl]-1,3-butadienyl]-1-ethylpyridinium monoperchlorate; Pyridine 1

**Catalog No.:** 06980  
**CAS No.:** 87004-02-2

**Chemical Formula:** C$_{19}$H$_{23}$ClO$_4$  
**Molecular Weight:** 378.85

**Appearance:** Purple needles

**Molar Absorptivity (in methanol):** 4.23 x 10$^4$ L mole$^{-1}$ cm$^{-1}$

**Structure:**

![](structure.png)

<table>
<thead>
<tr>
<th>Lasing Wavelength</th>
<th>Concentration (molar)</th>
<th>Abs $\lambda_{max}$</th>
<th>Fluorescence $\lambda_{max}$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max. Range</strong> (nm)</td>
<td><strong>Pump Source</strong> (nm)</td>
<td><strong>Solvent</strong></td>
<td><strong>(osc),</strong></td>
</tr>
<tr>
<td>690</td>
<td>645-730</td>
<td>Nd:YAG(532) $^5$</td>
<td>Ethanol</td>
</tr>
<tr>
<td>692</td>
<td>659-732</td>
<td>Nd:YAG(532) $^{110}$</td>
<td>Methanol</td>
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<td>692</td>
<td>667-720</td>
<td>Nd:YAG(532) $^{239}$</td>
<td>Ethanol</td>
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<tr>
<td>693</td>
<td>661-740</td>
<td>Nd:YAG(532) $^5$</td>
<td>Methanol</td>
</tr>
<tr>
<td>693</td>
<td>664-755</td>
<td>Nd:YAG(355) $^{110}$</td>
<td>Methanol</td>
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<td>664-722</td>
<td>Nd:YAG(355) $^{239}$</td>
<td>Ethanol</td>
</tr>
<tr>
<td>695</td>
<td>658-738</td>
<td>Nd:YAG(side-p,532) $^{57}$</td>
<td>Methanol</td>
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<td>695</td>
<td>658-738</td>
<td>Nd:YAG(end-p,532) $^{57}$</td>
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<tr>
<td>695</td>
<td>660-730</td>
<td>Nd:YAG(d,m-l,QS) $^{168}$</td>
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<tr>
<td>709</td>
<td>688-740</td>
<td>Nd:YAG(532) $^{113}$</td>
<td>DMSO</td>
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<td>N$_2$(337) $^{183}$</td>
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<td>675-750</td>
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<td>PC/EG</td>
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<tr>
<td>673-733</td>
<td>Ar(m-l,514) $^{136}$</td>
<td>PC/EG,15/85</td>
<td>1.8 x 10$^{-3}$</td>
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<td>Ar(458-514) $^{175}$</td>
<td>PC/EG,15/85</td>
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<tr>
<td>684</td>
<td>661-724</td>
<td>Cu(511,578)</td>
<td>Methanol</td>
</tr>
</tbody>
</table>

DMSO = Dimethylsulfoxide; EG = Ethylene Glycol; PC = Propylene Carbonate; m = Methanol

* Equivalent species may be provided or substituted

**REFERENCES:**

5. Laser Photonics, Inc., 12351 Research Parkway, Orlando, FL 32826, formerly, Molecron Corporation and Cooper LaserSonics, Inc.

17. Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039

53. Continuum, 3150 Central Expressway, Santa Clara, CA 95051, formerly, Quantel International

57. Quanta-Ray, Note: Quanta-Ray is now incorporated as a part of Spectra-Physics, 1250 W. Middlefield Road, Mountain View, CA 94039

110. Lumonics Inc., 105 Schneider Road, Kanata, (Ottawa), Ontario, Canada K2K 1Y3
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113. R.G. Hulet, private commun., 1982
183. Thermo Laser Science, 26 Landsdowne Street, Cambridge, MA 02139

For a current list of biology, biological stain, or biochemistry references for LDS 698 from PubMed, click on the following link:

[LDS 698 or Pyridine 1](#)