

## NEAR INFRARED LASER DYE FOR PRINTING APPLICATIONS

### ADS815EI

#### INTRODUCTION

American Dye Source, Inc. offers from gram to kilogram high purity near infrared absorption dyes for research and production purposes. We also provide custom synthesis of new infrared dyes according to the customer's specifications.

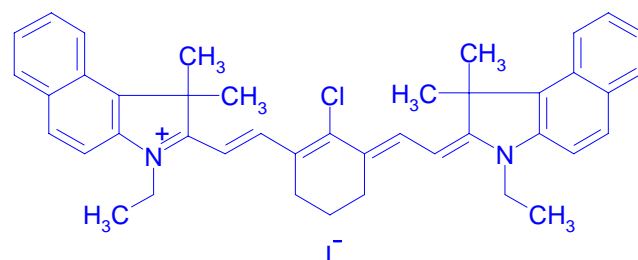
#### DESCRIPTION

Near Infrared Laser Dye **ADS815EI** is 2-[2-[2-chloro-3-[2-(1,3-dihydro-3,3-dimethyl-1-ethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]-ethenyl]-3,3-dimethyl-1-ethyl-1H-benz[e]indolium iodide. This near infrared dye is soluble in methanol, as well as many other solvents. **ADS815EI** is an ideal dye for use in security printings, lithographic printing plates and silver films.

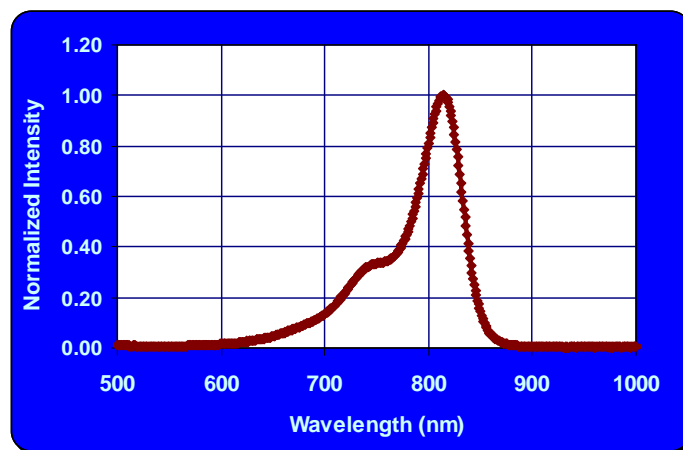
#### TECHNICAL DATA

- ❑ Appearance: Dark brown powder
- ❑ CAS Registry Number: N/A
- ❑ Chemical Formula:  $C_{42}H_{44}I N_2 Cl$
- ❑ Formula Weight: 739.18 g/mol
- ❑ Melting Temperature: > 200 °C (Dec.)
- ❑ Absorption Maximum: 815 nm (methanol)
- ❑ Absorption Coefficient:  $2.6 \times 10^5$  L/mol.cm

#### STRUCTURE



#### UV-VIS-NIR SPECTRUM



Absorption spectrum of ADS815EI in methanol

#### CONTACT INFORMATION

##### American Dye Source, Inc.

555 Morgan Boulevard  
Baie d'Urfe, Quebec, Canada H9X 3T6  
Tel. 514 457-0070  
Fax 514 457-0071  
Website: [www.adsdyes.com](http://www.adsdyes.com)  
E-mail: [info@adsdyes.com](mailto:info@adsdyes.com)

#### DISCLAIMER

The information in this bulletin is believed to be accurate, but all recommendations are made without warranty since the conditions of use are beyond the control of American Dye Source, Inc. The listed properties are illustrative only, and not product specifications. American Dye Source, Inc. disclaims any liability in connection with the use of the information, and does not warrant against infringement by reason of the use of its products in combination with other material or in any process.