

## WATER SOLUBLE NEAR INFRARED ABSORPTION DYE

# ADS830WS

### 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.

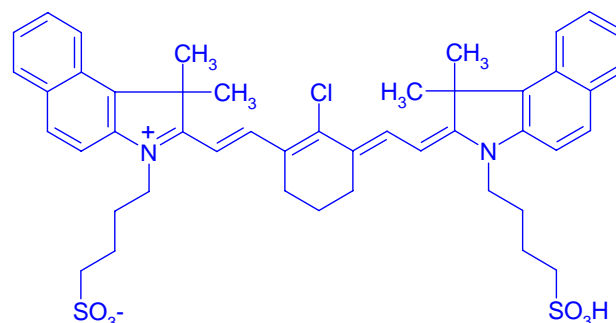
### DESCRIPTION

**ADS830WS** is 2-[2-[2-Chloro-3-[2-(1,3-dihydro-3,3-dimethyl-1-(4-sulfobutyl)-2H-benz[e]-indol-2-ylidene)-ethylidene]-1-cyclohexen-1-yl]-ethenyl]-3,3-dimethyl-1-(4-sulfobutyl)-1H-benz[e]indolium, inner salt, free acid. **ADS830WS** is highly soluble in water and methanol, as well as other solvents. **ADS830WS** is an ideal dye for use in security printings, lithographic printing plates, and many other applications.

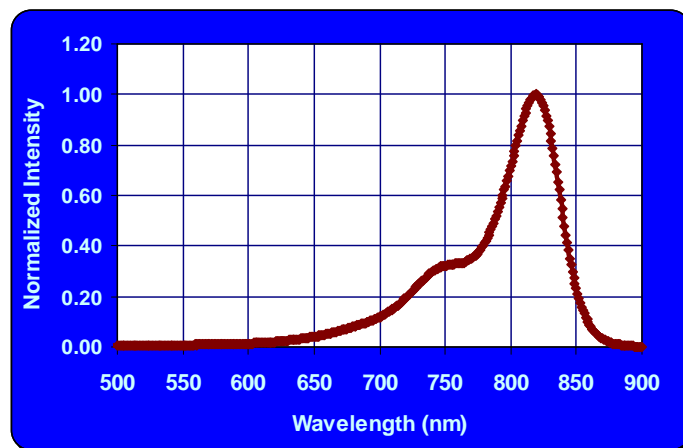
### TECHNICAL DATA

- ❑ Appearance: Dark green powder
- ❑ Chemical Formula:  $C_{46} H_{51} N_2 O_6 S_2 Cl$
- ❑ Formula Weight: 827.49 g/mol
- ❑ Decomposition Temp.: 253 – 255 °C
- ❑ Absorption Maximum: 819 nm
- ❑ Absorption Coefficient:  $2.4 \times 10^5$  L/mol cm

### STRUCTURE



### UV-VIS-NIR SPECTRUM



Absorption spectrum of ADS830WS in methanol

### CONTACT INFORMATION

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