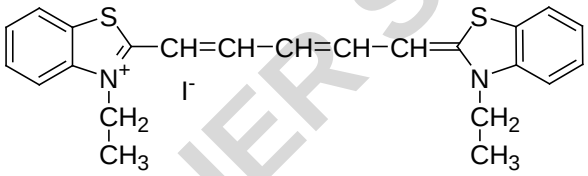
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PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: **DiSC$_2$(5)** (3,3'-diethylthiadicarbocyanine, iodide)

CATALOG # **40041**

MOLECULAR INFORMATION: $C_{23}H_{23}IN_2S_2$
MWt: 518.48
[514-73-8]



PROPERTIES:

Color & Form	Dark green solid
Purity	≥ 95% by TLC
Solubility	Soluble in DMSO or MeOH
Absorption	651nm (MeOH)
Extinction Coefficient	

STORAGE AND HANDLING: Stored desiccated at 4 °C. Protect from light, especially when in solution.

APPLICATION: DiSC$_2$(5) binds to DNA-DNA or PNA-DNA duplexes with a large blue-shift of the absorption spectrum. Binding of the dye to PNA-DNA hybrid, in particular, blue-shifts the dye absorption spectrum by as much as 115 nm, offering a visual method to detect nucleic acid hybridization.[1,2]

Ref.: 1) *Nucleic Acid Res.* **30**(2), 3(2002); 2) *J. Am. Chem. Soc.* **121**, 2686(1999)

TOXICITY: Unknown

FIRST AID: Potentially harmful. Avoid prolonged or repeated exposure. Avoid getting in eyes, on skin, or on clothing. Wash thoroughly after handling. If eye or skin contact occurs, wash affected areas with plenty of water for 15 minutes and seek medical advice. In case of inhaling or swallowing, move individual to fresh air and seek medical advice immediately.

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DOMINIQUE DUTSCHER SAS