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## **PRODUCT AND SAFETY DATA SHEET**

**PRODUCT NAME:** 

**DiOC**<sub>2</sub>(3), **Iodide** (3,3'-Diethyloxacarbocyanine, iodide)

CATALOG #:

70008

 $\begin{array}{c|c} & O \\ & & CH=CH-CH= \\ & & N^+ \\ & & CH_2 \\ & & CH_2 \\ & & CH_3 \\ \end{array}$ 

Color & Form Purity Solubility Absorption\Emission Extinction Coefficient	Orange solid $\geq$ 98% TLC Soluble in DMF orDMSO 482/497 nm (in MeOH) 150,000 cm <sup>-1</sup> M <sup>-1</sup> (in MeOH)
STORAGE AND HANDLING:	Store at 4 °C and protect from light, especially when in solution.
APPLICATION:	DiOC <sub>2</sub> (3) has been used for measuring membrane potentials in bacteria. The green fluorescent dye forms red fluorescent aggregates with increasing membrane potential. The spectral shifting phenomenon has been exploited to measure membrane potential ratiometrically. Ref: 1) <i>Biophysics J.</i> <b>56</b> , 979(1989).
ΤΟΧΙΟΙΤΥ:	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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