PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: Acridine Orange, 10mg/ml solution in water (high purity)

CATALOG #: 40039

MOLECULAR INFORMATION:
- Formula: C_{17}H_{20}ClN_{3}
- MWt: 301.82
- CAS #: 65-61-2

PROPERTIES:
- Color & Form: Yellow solution
- Purity: > 98% by HPLC
- Solubility: Soluble in water
- Absorption/Emission: 493/526nm
- Extinction Coefficient: >35,000

STORAGE AND HANDLING:
- Stored at 4 °C and protect from light

APPLICATION:
Acridine orange (AO) stains dsDNA green (525 nm) and RNA or single stranded DNA red (650 nm). The dye is membrane-permeant and its nucleic acid binding property has been used for cell-cycle studies. Acridine orange has also been used for the detection of microorganisms in cerebrospinal fluid and other clinical specimens. We offer a highly purified form of acridine orange while most of the other commercially available grades of AO are either in zinc chloride complex form or of low purity.

![Absorption and emission of acridine orange (AO) bound to DNA.](image)


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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