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PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: Rhodamine 123

CATALOG NUMBER: 70010

MOLECULAR C21H17ClN2O3 Mwt: 381 **INFORMATION:** [62669-70-9]

N H₂ Cl

PROPERTIES:

Color & Form Orange red solid **Purity** > 96% by HPLC

Soluble in DMSO and DMF **Solubility** 505nm\534nm (in MeOH) $\lambda_{ex} \backslash \lambda_{em}$

Extinction 97,000 M⁻¹cm⁻¹ (505 nm; in MeOH) **Coefficient** (ε)

STORAGE AND HANDLING:

Stored desiccated at 4 °C upon receipt. Protect from light, especially when in solution.

APPLICATION: Rhodamine 123 is a popular green fluorescent mitochondrial dye that stains

mitochondria in living cells in a membrane potential-dependent fashion. It is widely

used in flow cytometry studies involving mitochondrial membrane potential

Ref: 1) Millot, J.M., et al. Cytometry 17, 50(1994); 2) Bernal, S.D., et al Science 218, 1117(1982); 3) Johnson, L.V., et al.

J. Cell Biol. 88, 526(1981).

TOXICITY: Reproductive Effects: TDLo: 60 mg/kg intraperitoneal, mouse (7-10D preg) (post

implantation mortality)

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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