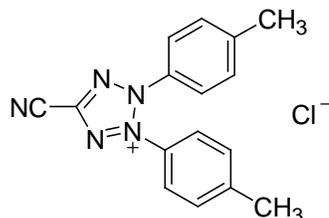


## PRODUCT AND SAFETY DATA SHEET

**PRODUCT NAME:** CTC (5-Cyano-2,3-ditolyl tetrazolium chloride)**CATALOG #:** 10063**MOLECULAR INFORMATION:** C<sub>16</sub>H<sub>14</sub>ClN<sub>5</sub>  
Mwt: 311.8  
[102568-47-8]**PROPERTIES:**

<b>Color &amp; Form</b>	Pale yellow solid
<b>Purity</b>	> 90%
<b>Solubility</b>	Soluble in water.
<b>Ab / Em</b>	450nm / 630nm (reduced state)

**STORAGE AND HANDLING:** Store at -20 °C.**APPLICATION:** 5-Cyano-2,3-ditolyl tetrazolium chloride (CTC) has been used to evaluate the respiratory activity of many bacterial populations as well as populations undergoing drug efficacy evaluations. Healthy cells respiring via the electron transport chain will absorb and reduce CTC into an insoluble, red fluorescent formazan product. Cells not respiring or respiring at slower rates will reduce less CTC, and consequently produce less fluorescent product, giving a semi-quantitative estimate of healthy vs. unhealthy bacteria.

Ref.: 1) *Cytometry* **54A**, 27 (2003); 2) *Appl Environ Microbiol* **69**, 2857(2003); 3) *Biodegradation* **13**, 285 (2002); 4) *J. Microbiol Methods* **52**, 75(2003); 5) *Int J Food Microbiol* **92**, 327 (2004); 6) *Microbiol Methods* **52**, 47 (2003); 7) *Appl Environ Microbiol* **69**, 7462 (2003).

**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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