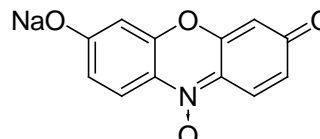


PRODUCT AND SAFETY DATA SHEET

PRODUCT NAME: **Resazurin, Sodium Salt** (also called AlamarBlue™, a trademark of AccuMed International, Inc)

CATALOG #: **10054**

MOLECULAR INFORMATION: C₁₂H₆NNaO₄
Mwt: 251.17
[62758-13-8]

**PROPERTIES:**

Color & Form Dark green/black solid
Purity ≥ 95% by HPLC
Solubility Soluble in DMSO or H₂O
Absorption/Emission 602nm/none (pH9)
Extinction Coefficient 35,000

STORAGE AND HANDLING:

Store desiccated at ≤ 4 °C, and protect from light.

APPLICATION:

Resazurin, which is the N-oxide of the fluorescent dye resorufin and has also been under the name AlamarBlue™, is useful for detecting reductive activities in cells and has been widely used for measuring cell proliferation^{1,2} and mitochondrial metabolic activity. Resazurin itself is nonfluorescent until it is reduced to the highly red fluorescent resorufin (#10062). Usually, NADPH or NADH is the reductant that converts resazurin to resorufin in the presence of diaphorase as the enzyme. Thus, resazurin can be used to detect NADH, NADPH, or diaphorase level. Furthermore, the resazurin/diaphorase/NADPH system can be used to detect any biochemical or enzyme activity that is involved in a biochemical reaction generating NADH or NADPH.³⁻⁹

Although resazurin is available from most of the chemical suppliers, a trace amount of resorufin contaminant often make the material unsuitable for bioassay applications. We supply a high grade resazurin that has a minimal background fluorescence. Please also see Resazurin Cell Proliferation Assay Kit in Bioscience Kit Section.

Ref.: 1) *J. Clin. Lab. Anal.* **9**, 89(1995); 2) *J. Immunol. Methods* **175**, 181 (1994); 3) *J. Anal. Toxicol.* **8**, 273(1984); 4) *Clin. Chem.* **29**, 171(1983); 5) *Biochem. Biophys. Acta* **484**, 249(1977); 6) *Clin. Chim. Acta* **107**, 149(1980); 7) *Clin. Chem.* **26**, 613(1980); 8) *Anal. Biochem.* **164**, 482(1987); 9) *Clin. Chim Data* **216**, 135(1993).

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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