

## Product Information

### 1-Thioglycerol Cell Culture Tested

Product Number **M 6145**  
Storage Temperature 2-8 °C

#### Product Description

Molecular Formula: C<sub>3</sub>H<sub>8</sub>O<sub>2</sub>S  
Molecular Weight: 108.2  
CAS Number: 96-27-5  
Density: 1.245 g/ml<sup>1</sup>  
Molarity: 11.5 M (calculated based on density and molecular weight)  
Boiling Point: 100-101 °C<sup>1</sup>  
Synonyms: α-monothioglycerol, thioglycerin, 3-mercapto-1,2-propanediol<sup>2</sup>

This product is cell culture tested (0.003 mg/l) and is suitable for cell culture applications.

1-Thioglycerol is a reagent that is used in analytical chemistry, materials science, and cell culture research. In mass spectrometry (MS), it is notably used as a matrix substrate in FAB (fast atom bombardment) MS methods.<sup>3,4</sup> Compounds that have been investigated by FAB-MS using 1-thioglycerol as the FAB-MS matrix include lipids, gangliosides, benzo[a]pyrenes, and iron-siderophore complexes<sup>5,6,7,8,9</sup>

In materials and biomaterials science, 1-thioglycerol has been used in the preparation of thiol modified gold surfaces for human immunoglobulin binding and of water soluble luminescent CdS quantum dots.<sup>10,11,12</sup> Cell culture studies of embryonic cortical and hippocampal neurons, mouse bone marrow mast cell lines, and human B cell lines have utilized 1-thioglycerol as a component of the culture medium to stimulate proliferation.<sup>13,14,15,16</sup>

#### Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

#### Preparation Instructions

This product is miscible in ethanol (1 ml/ml, 50%, v/v), yielding a clear, colorless solution. It is also miscible in water (0.1 M).

#### References

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