



## Product Information

### Lithium dodecyl sulfate

Product Number **L 2274**  
Store at Room Temperature

#### Product Description

Molecular Formula:  $C_{12}H_{25}O_4SLi$   
Molecular Weight: 272.3  
CAS Number: 2044-56-6  
Synonyms: dodecyl lithium sulfate, dodecyl sulfate lithium salt, lithium lauryl sulfate, LDS

This product is designated as Electrophoresis grade. It has been tested for use in the running buffer (0.5 g LDS/750 ml buffer) for the Weber-Osborn electrophoresis method.

Lithium dodecyl sulfate (LDS) is an anionic detergent and surfactant that is frequently used in electrophoresis and chromatography. LDS may be substituted for sodium dodecyl sulfate (SDS) in electrophoresis under cold conditions.<sup>1,2</sup> The use of LDS in micellar electrokinetic chromatography has been extensively studied.<sup>3,4,5,6,7</sup> A report has been published on the partition equilibria of LDS between water and bilayer membranes.<sup>8</sup>

LDS has been utilized in protein electrophoresis and proteomics studies.<sup>2,9,10,11,12</sup> The three-dimensional structure of the amyloid  $\beta$ -protein fragment 25-35 has been investigated in LDS micelles by two-dimensional  $^1H$  NMR.<sup>13</sup> LDS has been used to induce changes in protein conformation.<sup>14</sup>

#### Precautions and Disclaimer

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

#### Preparation Instructions

This product is soluble in water (50 mg/ml), yielding a clear, colorless solution.

#### Storage/Stability

In general, autoclaved lauryl sulfate solutions undergo hydrolysis to yield lauryl alcohol, which precipitates from solution, and sulfuric acid, which decreases the solution pH. It is not advised to autoclave lauryl sulfate solutions.

#### References

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