

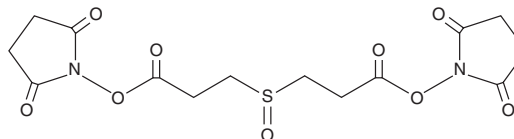
# PRODUCT INFORMATION



## Disuccinimidyl Sulfoxide

Item No. 9002863

**CAS Registry No.:** 1351828-03-9  
**Formal Name:** 3,3'-sulfinylbis-propanoic acid,  
1,1'-bis(2,5-dioxo-1-pyrrolidinyl) ester  
**Synonym:** DSSO  
**MF:** C<sub>14</sub>H<sub>16</sub>N<sub>2</sub>O<sub>9</sub>S  
**FW:** 388.3  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Disuccinimidyl sulfoxide (DSSO) is supplied as a crystalline solid. A stock solution may be made by dissolving the DSSO in the solvent of choice. DSSO is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of DSSO in these solvents is approximately 20 and 10 mg/ml, respectively.

DSSO is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DSSO should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. DSSO has a solubility of approximately 0.15 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

DSSO is a protein cross-linking probe designed to be used with mass spectrometry (MS). It contains two symmetric collision-induced dissociation (CID)-cleavable sites that allow effective identification of DSSO-cross-linked peptides based on their distinct fragmentation patterns.<sup>1</sup> The CID-induced separation of interlinked peptides in MS/MS permits MS<sup>3</sup> analysis of single peptide chain fragment ions with defined modifications, due to DSSO remnants, for easy interpretation and unambiguous identification using existing database searching tools.<sup>1</sup>

### Reference

1. Kao, A., Chiu, C.-I., Vellucci, D., *et al.* Development of a novel cross-linking strategy for fast and accurate identification of cross-linked peptides of protein complexes. *Mol. Cell. Proteomics* **10(1)** (2011).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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