

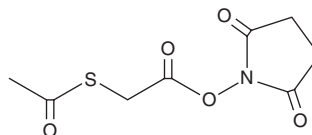
# PRODUCT INFORMATION



## N-Succinimidyl-S-acetylthioacetate

Item No. 36928

CAS Registry No.: 76931-93-6  
Formal Name: 2-(acetylthio)-acetic acid,  
2,5-dioxo-1-pyrrolidinyl ester  
Synonym: SATA  
MF:  $C_8H_9NO_5S$   
FW: 231.2  
Purity:  $\geq 90\%$   
Supplied as: A solid  
Storage:  $-20^\circ C$   
Stability:  $\geq 4$  years



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

### Laboratory Procedures

N-Succinimidyl-S-acetylthioacetate is supplied as a solid. A stock solution may be made by dissolving the N-succinimidyl-S-acetylthioacetate in the solvent of choice, which should be purged with an inert gas. N-Succinimidyl-S-acetylthioacetate is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of N-succinimidyl-S-acetylthioacetate in these solvents is approximately 16 mg/ml. N-Succinimidyl-S-acetylthioacetate is slightly soluble in ethanol.

### Description

N-Succinimidyl-S-acetylthioacetate is a protein-modifying agent.<sup>1</sup> It introduces sulfhydryl groups to proteins via S-acetylthioacetylation of free amine groups, which can be subsequently deprotected by deacetylation to reveal an unprotected thiol. N-Succinimidyl-S-acetylthioacetate has been used in conjunction with the protein cross-linking reagent SMCC (Item No. 28955) in the conjugation of proteins with IgG antibodies for use in ELISAs.<sup>1,2</sup>

### References

1. Duncan, R.J., Weston, P.D., and Wrigglesworth, R. A new reagent which may be used to introduce sulfhydryl groups into proteins, and its use in the preparation of conjugates for immunoassay. *Anal. Biochem.* **32**(1), 68-73 (1983).
2. Nanda, S., Muralidhar, K., and Kar, S.K. Thermostable  $\alpha$ -amylase conjugated antibodies as probes for immunodetection in ELISA. *J. Immunoassay Immunochem.* **23**(3), 327-345 (2002).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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