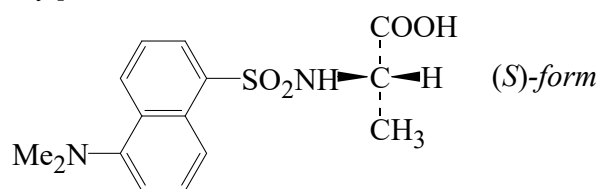




>>Entry Name: **Dansylalanine**

Synonym(s): *N*-[[5-(Dimethylamino)-1-naphthalenyl]sulfonyl]alanine, 9CI



Molecular Formula: C₁₅H₁₈N₂O₄S

Molecular Weight: 322.384

Accurate Mass: 322.098728

Percentage Composition: C 55.89%; H 5.63%; N 8.69%; O 19.85%; S 9.95%

>>Variant: (S)-form

Synonym(s): L-form

CAS Registry Number: 35021-10-4

Molecular Formula: C₁₅H₁₈N₂O₄S

Molecular Weight: 322.384

Accurate Mass: 322.098728

Percentage Composition: C 55.89%; H 5.63%; N 8.69%; O 19.85%; S 9.95%

Source/Synthesis: Derived from alanine *N*-terminal peptides and proteins following *N*-terminal labelling with 5-(Dimethylamino)-1-naphthalenesulfonyl chloride [FNS92-C](#) and hydrol.

>>Derivative: Cyclohexylamine salt

CAS Registry Number: 53332-27-7

Physical Description: Cryst. (MeOH)

Melting Point: Mp 152-155°

>>Derivative: Succinimido ester

CAS Registry Number: 63553-69-5

Molecular Formula: C₁₉H₂₁N₃O₆S

Molecular Weight: 419.457

Accurate Mass: 419.115107

Percentage Composition: C 54.41%; H 5.05%; N 10.02%; O 22.89%; S 7.64%

Use/Importance: Intermed. for dansyl-labelled peptides

Melting Point: Mp 175-178°

References:

Seiler, N., *Methods Biochem. Anal.*, 1970, **18**, 259-337, (rev, props, detn)

Seiler, N. *et al.*, *Anal. Biochem.*, 1971, **44**, 451-457, (ms)

Polonski, T. *et al.*, *Tetrahedron*, 1974, **30**, 641-643, (synth, uv, ord)

Aleksandrova, L.A. *et al.*, *Izv. Akad. Nauk SSSR, Ser. Khim.*, 1977, 647-653; *Bull. Acad. Sci. USSR, Div. Chem. Sci. (Engl. Transl.)*, 1977, 583-589, (succinimido ester, synth, use)