



>>Entry Name: Fluorenylmethylenoxycarbonyltryptophan

Synonym(s): *N*-[(9*H*-Fluoren-9-ylmethoxy)carbonyl]tryptophan, 9Cl. FmocTrpOH

Molecular Formula: C₂₆H₂₂N₂O₄

Molecular Weight: 426.471

Accurate Mass: 426.157958

Percentage Composition: C 73.23%; H 5.20%; N 6.57%; O 15.01%

General Statement: Deriv. of 9-Fluorenyl methyl chloroformate [DMJ03-G](#)

>>Variant: L-form

CAS Registry Number: 35737-15-6

Molecular Formula: C₂₆H₂₂N₂O₄

Molecular Weight: 426.471

Accurate Mass: 426.157958

Percentage Composition: C 73.23%; H 5.20%; N 6.57%; O 15.01%

Melting Point: Mp 185-187°

Optical Rotation: $[\alpha]_{\text{D}}^{23} +6.4$ (c, 1 in EtOAc)

Aldrich: 40868-9

Fluka: 47637

Sigma: F0759

>>Derivative: 4-Nitrophenyl ester

Synonym(s): FmocTrpONp

CAS Registry Number: 71989-37-2

Melting Point: Mp 213-215°

Optical Rotation: $[\alpha]_{\text{D}} -19.6$ (c, 1.2 in DMF + 1% AcOH)

>>Derivative: Piperidyl ester

Synonym(s): FmocTrpOPip

CAS Registry Number: 35661-45-1

Melting Point: Mp 134-135 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +56.27$ (c, 1.1 in CHCl₃)

>>Derivative: Fluoride

CAS Registry Number: 130882-72-3

Molecular Formula: C₂₆H₂₁FN₂O₃

Molecular Weight: 428.462

Accurate Mass: 428.153621

Percentage Composition: C 72.89%; H 4.94%; F 4.43%; N 6.54%; O 11.20%

Use/Importance: Used in peptide synthesis

Physical Description: Cryst.

Melting Point: Mp 125-128°

Optical Rotation: $[\alpha]_{\text{D}}^{24} -5.2$ (c, 1 in EtOAc)

References:

Carpino, L.A. *et al.*, *J.O.C.*, 1972, **37**, 3404, (*synth, piperidyl*)

Bodanszky, A. *et al.*, *J.O.C.*, 1980, **45**, 72, (*nitrophenyl*)

Carpino, L.A. *et al.*, *J.A.C.S.*, 1990, **112**, 9651-9652, (*fluoride*)