



>>Entry Name: Fluorenylmethylenoxycarbonylmethionine

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

Molecular Formula: C₂₀H₂₁NO₄S

Molecular Weight: 371.456

Accurate Mass: 371.119129

Percentage Composition: C 64.67%; H 5.70%; N 3.77%; O 17.23%; S 8.63%

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

>>Variant: L-form

CAS Registry Number: 71989-28-1

Molecular Formula: C₂₀H₂₁NO₄S

Molecular Weight: 371.456

Accurate Mass: 371.119129

Percentage Composition: C 64.67%; H 5.70%; N 3.77%; O 17.23%; S 8.63%

Melting Point: Mp 129-132°

Optical Rotation: [α]_D -28.3 (c, 1 in DMF)

Aldrich: 40866-2

Fluka: 47634

Sigma: F0384

>>Derivative: 4-Nitrophenyl ester

Synonym(s): FmocMetONp

CAS Registry Number: 71989-29-2

Melting Point: Mp 125-127°

Optical Rotation: [α]_D²² -51.6 (c, 1.2 in 99:1 DMF/AcOH)

>>Derivative: Fluoride

CAS Registry Number: 130859-02-8

Molecular Formula: C₂₀H₂₀FNO₃S

Molecular Weight: 373.447

Accurate Mass: 373.114792

Percentage Composition: C 64.33%; H 5.40%; F 5.09%; N 3.75%; O 12.85%; S 8.59%

Biological Use/Importance: Used in peptide synthesis

Physical Description: Cryst.

Melting Point: Mp 137-139°

Optical Rotation: [α]_D -12.9 (c, 0.55 in EtOAc)

References:

Chang, C.-D. *et al.*, *Int. J. Pept. Protein Res.*, 1980, **15**, 59, (*synth*)

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

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