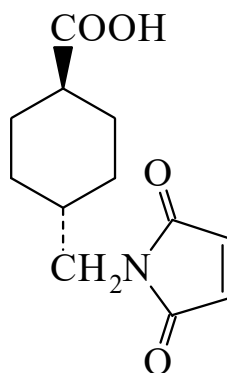




>>Entry Name: 4-(*N*-Maleimidomethyl)cyclohexanecarboxylic acid

Synonym(s): 4-[(2,5-Dihydro-2,5-dioxo-1*H*-pyrrol-1-yl)methyl]cyclohexanecarboxylic acid, 9CI



Molecular Formula: C₁₂H₁₅NO₄

Molecular Weight: 237.255

Accurate Mass: 237.100109

Percentage Composition: C 60.75%; H 6.37%; N 5.90%; O 26.97%

>>Variant: (1*RS*,4*RS*)-form

Synonym(s): *trans*-form

Molecular Formula: C₁₂H₁₅NO₄

Molecular Weight: 237.255

Accurate Mass: 237.100109

Percentage Composition: C 60.75%; H 6.37%; N 5.90%; O 26.97%

>>Derivative: 2,5-Dioxo-1-pyrrolidinyl ester

Synonym(s): Succinimidy 4-(*N*-maleimidomethyl)cyclohexanecarboxylate. 1-[[4-[(2,5-Dioxo-1-pyrrolidinyl)oxy]carbonyl]cyclohexyl]methyl]-1*H*-pyrrole-2,5-dione, 9CI
. SMCC

CAS Registry Number: 64987-85-5

Molecular Formula: C₁₆H₁₈N₂O₆

Molecular Weight: 334.328

Accurate Mass: 334.116488

Percentage Composition: C 57.48%; H 5.43%; N 8.38%; O 28.71%

Use/Importance: Heterobifunctional cross-linking reagent used in enzyme coupling and other biochemical syntheses

Melting Point: Mp 165-167 subl.°

Aldrich: 28407-6

Fluka: 63181

Sigma: M6264

>>Derivative: Pentafluorophenyl ester

Synonym(s): Pentafluorophenyl 4-(*N*-maleimidomethyl)cyclohexanecarboxylate

CAS Registry Number: 153075-20-8

Molecular Formula: C₁₈H₁₄F₅NO₄

Molecular Weight: 403.305

Accurate Mass: 403.084299

Percentage Composition: C 53.61%; H 3.50%; F 23.55%; N 3.47%; O 15.87%

Use/Importance: Alternative to SMCC for similar purposes, more easily prepd.

Physical Description: Solid

Melting Point: Mp 157-158°

References:

Neilsen, O. *et al.*, *Synthesis*, 1991, 819, (*synth*, *pmr*, *cmr*, *ms*)

Adamczyk, M. *et al.*, *Synth. Commun.*, 1993, **25**, 592, (*bibl*)