



>>Entry Name: Malonuric acid

Synonym(s): 3-[(Aminocarbonyl)amino]-3-oxopropanoic acid, 9CI. Allophanylacetic acid. *N*-Carbamoylmalonamic acid

CAS Registry Number: 542-07-4

H2NCONHCOCH2COOH

Molecular Formula: C4H6N2O4

Molecular Weight: 146.102

Accurate Mass: 146.032758

Percentage Composition: C 32.88%; H 4.14%; N 19.17%; O 43.80%

>>Derivative: Et ester

Synonym(s): *N*-[[[(Aminocarbonyl)amino]carbonyl]acetamide, 9CI

CAS Registry Number: 93210-29-8

Molecular Formula: C6H10N2O4

Molecular Weight: 174.156

Accurate Mass: 174.064058

Percentage Composition: C 41.38%; H 5.79%; N 16.09%; O 36.75%

Physical Description: Prisms (H<sub>2</sub>O)

Melting Point: Mp 128°

>>Derivative: Amide

CAS Registry Number: 591-38-8

Molecular Formula: C4H7N3O3

Molecular Weight: 145.118

Accurate Mass: 145.048742

Percentage Composition: C 33.11%; H 4.86%; N 28.96%; O 33.08%

Physical Description: Needles (H<sub>2</sub>O)

>>Derivative: Nitrile

Synonym(s): *N*-(Aminocarbonyl)-2-cyanoacetamide, 9CI. Cyanoacetylurea

CAS Registry Number: 1448-98-2

Molecular Formula: C4H5N3O2

Molecular Weight: 127.102

Accurate Mass: 127.038177

Percentage Composition: C 37.80%; H 3.96%; N 33.06%; O 25.18%

Physical Description: Cryst. (H<sub>2</sub>O)

Melting Point: Mp 212° (209°)

Aldrich: C8880-7

>>Derivative: *N*-Formyl

Molecular Formula: C5H6N2O5

Molecular Weight: 174.113

Accurate Mass: 174.027673

Percentage Composition: C 34.49%; H 3.47%; N 16.09%; O 45.95%

Physical Description: Cryst. (H<sub>2</sub>O)

Melting Point: Mp 189-190°

References:

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Conrad, M. *et al.*, *Ber.*, 1909, **42**, 741  
Wood, J.K. *et al.*, *J.C.S.*, 1909, **95**, 979, (*amide*)  
Bobranski, B. *et al.*, *J. Am. Pharm. Assoc., Sci. Ed.*, 1948, **37**, 62, (*nitrile*)  
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