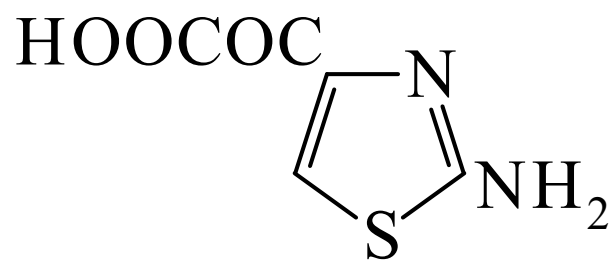




>>Entry Name: 2-Amino- $\alpha$ -oxo-4-thiazoleacetic acid

Synonym(s): 2-Amino-4-thiazoleglyoxylic acid



CAS Registry Number: 73150-67-1

Molecular Formula: C<sub>5</sub>H<sub>4</sub>N<sub>2</sub>O<sub>3</sub>S

Molecular Weight: 172.164

Accurate Mass: 171.994263

Percentage Composition: C 34.88%; H 2.34%; N 16.27%; O 27.88%; S 18.63%

Use/Importance: Oxime derivs. are intermediates for  $\beta$ -lactam antibiotics

Melting Point: Mp 174.5-175.5°

Aldrich: 45314-5

>>Derivative: *O*-Methyloxime (Z-)

Synonym(s): 2-Amino- $\alpha$ -(methoxyimino)-4-thiazoleacetic acid, 9CI

CAS Registry Number: 65872-41-5

Extra CAS Registry Numbers(s): 66341-09-1 91868-79-0

Molecular Formula: C<sub>6</sub>H<sub>7</sub>N<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 201.206

Accurate Mass: 201.020812

Percentage Composition: C 35.82%; H 3.51%; N 20.88%; O 23.86%; S 15.94%

Use/Importance: Used in the synth. of aminocephem antibiotics

Physical Description: Cryst.

Melting Point: Mp 192 dec.°

>>Derivative: Et ester

CAS Registry Number: 64987-08-2

Molecular Formula: C<sub>7</sub>H<sub>8</sub>N<sub>2</sub>O<sub>3</sub>S

Molecular Weight: 200.218

Accurate Mass: 200.025563

Percentage Composition: C 41.99%; H 4.03%; N 13.99%; O 23.97%; S 16.02%

Physical Description: Cryst. (EtOAc/EtOH)

Melting Point: Mp 150-152° (147-149°)

Aldrich: 28006-2

>>Derivative: Et ester, oxime (Z-)

CAS Registry Number: 64485-82-1

Molecular Formula: C<sub>7</sub>H<sub>9</sub>N<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 215.232

Accurate Mass: 215.036462

Percentage Composition: C 39.06%; H 4.21%; N 19.52%; O 22.30%; S 14.90%

Melting Point: Mp 195-197°

Aldrich: 28017-8

>>Derivative: Et ester, *O*-methyloxime (*E*-)

CAS Registry Number: 65052-66-6

Molecular Formula: C<sub>8</sub>H<sub>11</sub>N<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 229.259

Accurate Mass: 229.052112

Percentage Composition: C 41.91%; H 4.84%; N 18.33%; O 20.94%; S 13.99%

Physical Description: Cryst.

Melting Point: Mp 114-115°