>>**Entry Name: 4(5)-Nitro-2-imidazolecarboxylic acid,** 9CI

Related CAS Registry Numbers(s): 16147-98-1 109012-46-6

Molecular Formula: $C_4H_3N_3O_4$
Molecular Weight: 157.085
Accurate Mass: 157.012357
Percentage Composition: C 30.58%; H 1.92%; N 26.75%; O 40.74%

>>**Variant:** 1*H*-form

Molecular Formula: $C_4H_3N_3O_4$
Molecular Weight: 157.085
Accurate Mass: 157.012357
Percentage Composition: C 30.58%; H 1.92%; N 26.75%; O 40.74%

>>**Derivative:** *N*-Me
Synonym(s): 1-Methyl-4-nitro-1*H*-imidazole-2-carboxylic acid

CAS Registry Number: 109012-24-0
Molecular Formula: $C_5H_5N_3O_4$
Molecular Weight: 171.112
Accurate Mass: 171.028007
Percentage Composition: C 35.10%; H 2.95%; N 24.56%; O 37.40%
Physical Description: Cryst. (H_2O)
Melting Point: Mp 138 dec.°

>>**Derivative:** *N*-Me, Et ester

CAS Registry Number: 109012-23-9
Molecular Formula: $C_7H_9N_3O_4$
Molecular Weight: 199.166
Accurate Mass: 199.059307
Percentage Composition: C 42.21%; H 4.55%; N 21.10%; O 32.13%
Physical Description: Pale cream needles (EtOH)
Melting Point: Mp 130-131°

>>**Variant:** 3*H*-form

Molecular Formula: $C_4H_3N_3O_4$
Molecular Weight: 157.085
Accurate Mass: 157.012357
Percentage Composition: C 30.58%; H 1.92%; N 26.75%; O 40.74%

>>**Derivative:** *N*-Me
Synonym(s): 1-Methyl-5-nitro-1*H*-imidazole-2-carboxylic acid

CAS Registry Number: 3994-53-4

Molecular Formula: $C_5H_5N_3O_4$
Molecular Weight: 171.112
Accurate Mass: 171.028007
Percentage Composition: C 35.10%; H 2.95%; N 24.56%; O 37.40%
Use/Importance: Useful in treatment of histomoniasis and *Trichomonas vaginalis*
Physical Description: Solid
Melting Point: Mp 84-85 dec.°

>>**Derivative:** *N*-Me, Me ester

CAS Registry Number: 1563-98-0
Molecular Formula: $C_6H_7N_3O_4$
Molecular Weight: 185.139
Accurate Mass: 185.043657
Percentage Composition: C 38.93%; H 3.81%; N 22.70%; O 34.57%
Physical Description: Solid
Melting Point: Mp 107-110°