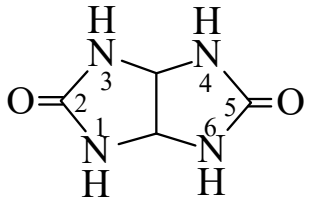
>>**Entry Name: Tetrahydroimidazo[4,5-*d*]imidazole-2,5(1*H*,3*H*)-dione,** 9CI, 8CI
Synonym(s): 2,4,6,8-Tetraazabicyclooctane-3,7-dione. Hexahydro-2,6-dioxoimidazolo[4,5-*d*]imidazole. Glycoluril. Acetylenediurene. Glyoxaldiurene. Acetylene carbamide



CAS Registry Number: 496-46-8

Molecular Formula: $C_4H_6N_4O_2$
Molecular Weight: 142.117
Accurate Mass: 142.049076
Percentage Composition: C 33.81%; H 4.26%; N 39.42%; O 22.52%
Use/Importance: Analogue of Biotin JRM31-Z
Physical Description: Needles or prisms (H_2O)
Melting Point: Mp 300 dec.°

Aldrich: G730-5
Fluka: 50643
Rare Chemicals Library: S5138-2

>>**Derivative:** *N*-Tetra-Ac

CAS Registry Number: 10543-60-9
Molecular Formula: $C_{12}H_{14}N_4O_6$
Molecular Weight: 310.266
Accurate Mass: 310.091336
Percentage Composition: C 46.45%; H 4.55%; N 18.06%; O 30.94%
Physical Description: Needles (EtOH)
Melting Point: Mp 236-238 dec.°
Rare Chemicals Library: S46128-8

>>**Derivative:** 1,4-Di-Me

CAS Registry Number: 17754-76-6
Molecular Formula: $C_6H_{10}N_4O_2$
Molecular Weight: 170.171
Accurate Mass: 170.080376
Percentage Composition: C 42.35%; H 5.92%; N 32.92%; O 18.80%
Physical Description: Needles (H_2O)
Melting Point: Mp 285-287°

>>**Derivative:** 1,6-Di-Me

CAS Registry Number: 3720-98-7
Molecular Formula: $C_6H_{10}N_4O_2$
Molecular Weight: 170.171
Accurate Mass: 170.080376
Percentage Composition: C 42.35%; H 5.92%; N 32.92%; O 18.80%
Physical Description: Needles (H_2O)
Melting Point: Mp 230-232°

>>**Derivative:** *N*-Tetra-Me

CAS Registry Number: 10095-06-4
Molecular Formula: $C_8H_{14}N_4O_2$
Molecular Weight: 198.224
Accurate Mass: 198.111676
Percentage Composition: C 48.47%; H 7.12%; N 28.26%; O 16.14%
Physical Description: Needles (EtOH)
Melting Point: Mp 217°

Rare Chemicals Library: S6432-8