



>>Entry Name: **Diformylamine**

Synonym(s): *N*-Formylformamide, 9CI

CAS Registry Number: 18197-22-3

Related CAS Registry Numbers(s): 18197-24-5 18197-27-8 26944-32-1 62837-48-3 81584-00-1
NH(CHO)₂

Molecular Formula: C₂H₃NO₂

Molecular Weight: 73.051

Accurate Mass: 73.016379

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

Physical Description: Cryst. (Et₂O)

Melting Point: Mp 41.5° (39-40°)

Boiling Point: Bp₁₂ 119°

>>Derivative: Na salt

CAS Registry Number: 18197-26-7

Use/Importance: Reagent for synth. of primary amines

Physical Description: Cryst. solid

Fluka: 71494

>>Derivative: *N*-Ac

see *N,N*-Diformylacetamide, [CSR22-E](#)

>>Derivative: *N*-Me

CAS Registry Number: 18197-25-6

Molecular Formula: C₃H₅NO₂

Molecular Weight: 87.078

Accurate Mass: 87.032029

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

Physical Description: Liq.

Boiling Point: Bp₇₃₅ 181-182°. Bp₂₀ 80-82°

>>Derivative: *N*-Et

Molecular Formula: C₄H₇NO₂

Molecular Weight: 101.105

Accurate Mass: 101.047679

Percentage Composition: C 47.52%; H 6.98%; N 13.85%; O 31.65%

Physical Description: Liq.

Boiling Point: Bp_{10.5} 70°

References:

Allenstein, E. *et al.*, *Chem. Ber.*, 1967, **100**, 3551; 1969, **102**, 4089, (*derivs*)

Noe, E.A. *et al.*, *J.A.C.S.*, 1973, **95**, 6118; 1975, **97**, 5811, (*synth, pmr, derivs*)

Yinglin, H. *et al.*, *Synthesis*, 1990, 122, (*synth, use, ir, pmr*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, FNL000