>>**Entry Name: 3-Amino-2-pyridinecarboxaldehyde,** 9CI
Synonym(s): 3-Amino-2-formylpyridine. 3-Aminopicolinaldehyde

CAS Registry Number: 55234-58-7

Molecular Formula: $C_6H_6N_2O$
Molecular Weight: 122.126
Accurate Mass: 122.048013
Percentage Composition: C 59.01%; H 4.95%; N 22.94%; O 13.10%
Physical Description: Yellow cryst. (petrol)
Melting Point: Mp 134° (125-127°)

>>**Derivative:** Thiosemicarbazone

CAS Registry Number: 143621-35-6
Molecular Formula: $C_7H_9N_5S$
Molecular Weight: 195.248
Accurate Mass: 195.057865
Percentage Composition: C 43.06%; H 4.65%; N 35.87%; S 16.42%
Biological Use/Importance: Antitumour agent. Ribonucleotide diphosphate reductase inhibitor
Physical Description: Solid
Melting Point: Mp 240-241 dec.°

>>**Derivative:** Ethylene acetal

CAS Registry Number: 143621-33-4
Molecular Formula: $C_8H_{10}N_2O_2$
Molecular Weight: 166.179
Accurate Mass: 166.074228
Percentage Composition: C 57.82%; H 6.07%; N 16.86%; O 19.26%
Physical Description: Cryst.
Melting Point: Mp 73-74°

>>**Derivative:** Ethylene acetal, 3-*N*-Ac

Molecular Formula: $C_{10}H_{12}N_2O_3$
Molecular Weight: 208.216
Accurate Mass: 208.084793
Percentage Composition: C 57.69%; H 5.81%; N 13.45%; O 23.05%
Physical Description: Solid
Melting Point: Mp 92-93°

>>**Derivative:** Ethylene acetal, 3-*N*-Me

Molecular Formula: $C_9H_{12}N_2O_2$
Molecular Weight: 180.206
Accurate Mass: 180.089878
Percentage Composition: C 59.99%; H 6.71%; N 15.55%; O 17.76%
Physical Description: Oil

>>**Derivative:** 3-*N*-Me, thiosemicarbazone

Physical Description: Yellow solid
Melting Point: Mp 240-242° (dec.)

References:

Decormeille, A. *et al.*, *C. R. Hebd. Seances Acad. Sci. Ser. C*, 1975, **280**, 381, *(synth, pmr)*
Chen, Q. *et al.*, *J. Het. Chem.*, 1992, **29**, 1197-1201, *(synth, pmr)*
Liu, M.-C. *et al.*, *J. Med. Chem.*, 1992, **35**, 3672; 1996, **39**, 2586-2593, *(deriv, synth, pmr)*
Niu, C. *et al.*, *Tetrahedron*, 1998, **54**, 393-400; 6311-6318, *(thiosemicarbazone, **synth**, pmr, cmr, bibl)*