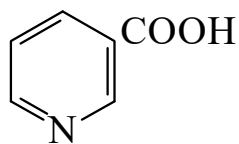




>>Entry Name: 3-Pyridinecarboxylic acid

ENTRY UNDER REVIEW

Synonym(s): Nicotinic acid, INN. Niacin, USAN. Nicamin. Nicobid. Wampocap. Many other names



CAS Registry Number: 59-67-6

Related CAS Registry Numbers(s): 1976-28-9

Molecular Formula: C₆H₅NO₂

Molecular Weight: 123.111

Accurate Mass: 123.032029

Percentage Composition: C 58.54%; H 4.09%; N 11.38%; O 25.99%

Biological Source: Present in fruits and other plant materials

Use/Importance: Used as 2.5% aq. soln. for extraction-photometric detn. of U(VI) ($\lambda_{\max}$ 556 nm, ϵ 120000).

Biological Use/Importance: Vitamin, enzyme cofactor, vasodilator. Antihyperglycaemic agent. Used to treat lipid disorders

Physical Description: Needles (H₂O or EtOH)

Development Status: Approved for clinical use in the UK (1999)

Melting Point: Mp 236° (225-227°)

Solubility: Sol. hot H₂O; spar. sol. Et₂O

pKa Value: pK_{a1} 2; pK_{a2} 4.82 (25°)

Calculated Log P Data: Log P 0.8 (calc)

Other Data: Sublimes

Hazard & Toxicity: Can cause dermal and gastrointestinal reactions and hepatic effects at high therapeutic doses. Low acute mammalian toxicity

Aldrich: N785-0

Fluka: 72310

Sigma: N0761

Supelco: 4-7864

>>Derivative: Na salt

Synonym(s): Nicoside. Naotin

CAS Registry Number: 54-86-4

Physical Description: Cryst. + 1.5H₂O

Hazard & Toxicity: LD₅₀ (mus, ivn) 2900 mg/kg

Aldrich: 17086-0

>>Derivative: Dichromate salt

CAS Registry Number: 104316-82-7

Use/Importance: Mild oxidising agent for alcohols, carbohydrates, mercaptans, hydroquinones and anthracenes

Physical Description: Orange-yellow cryst. (Me₂CO aq.)

Melting Point: Mp 215-217 dec°. Mp 235 dec.°

Aldrich: 30353-4

>>Derivative: Hydrochloride

CAS Registry Number: 636-79-3

Physical Description: Prisms or plates (H₂O)

Melting Point: Mp 274°

>>Derivative: Hydrobromide

CAS Registry Number: 51527-85-6

Boiling Point: Subl. 275°