



>>Entry Name: Sodium acetate

ENTRY UNDER REVIEW

Synonym(s): Acetic acid, sodium salt, 8CI. Ethanoic acid, sodium salt. FEMA 3024. E262

CAS Registry Number: 127-09-3

Related CAS Registry Numbers(s): 39230-37-0

NaOAc

Molecular Formula: $C_2H_3NaO_2$

Molecular Weight: 82.034

Accurate Mass: 82.003072

Percentage Composition: C 29.28%; H 3.69%; Na 28.02%; O 39.01%

Source/Synthesis: Synth. by reaction of NaOH with EtOH at 250-280° or by treatment of EtOAc with metallic Na or NaNH₂

Use/Importance: Commercially available. Food additive, polym. catalyst

Physical Description: White powder

Melting Point: Mp 324°

Solubility: V. sol. H₂O (119 g per 100 cm³ at 0°; 170 g per 100 cm³ at 100°); spar. sol. EtOH

Other Data: ΔH_f° -710 kJ mol⁻¹

Aldrich: W30240-6

Fluka: 71196

Sigma: S0289

>>Derivative: Trihydrate

CAS Registry Number: 6131-90-4

Molecular Formula: $C_2H_9NaO_5$

Molecular Weight: 136.08

Accurate Mass: 136.034767

Percentage Composition: C 17.65%; H 6.67%; Na 16.89%; O 58.79%

Source/Synthesis: Cryst. from aq. soln. of NaOAc

Use/Importance: Commercially available. Used in heat storage systems

Physical Description: Colourless monoclinic cryst., efflorescent. Dec. on heating by H₂O loss (-3H₂O at 123°)

Solubility: V. sol. H₂O (76 g per 100 cm³ at 0°; 139 g per 100 cm³ at 50°); sol. EtOH (2.1 g per 100 cm³ at 18°), Et₂O

Other Data: ΔH_f° -1605 kJ mol⁻¹

Aldrich: 23650-0

Fluka: 71193

Sigma: S9513

References:

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