



>>Entry Name: Sodium formate

Synonym(s): Formic acid, sodium salt, 8Cl. Methanoic acid, sodium salt

CAS Registry Number: 141-53-7

Na(OOCH)

Molecular Formula: CHNaO₂

Molecular Weight: 68.007

Accurate Mass: 67.987422

Percentage Composition: C 17.66%; H 1.48%; Na 33.80%; O 47.05%

Source/Synthesis: Manuf. from CO and either NaOH or NaHCO₃. Also produced by reaction of CO₂ with sodium amalgam in aq. soln.

Use/Importance: Commercially available. Reducing agent widely used in org. chem. Stabilising agent particularly for enzyme containing liq. detergents

Physical Description: Colourless monoclinic deliquescent cryst.

Melting Point: Mp 259-261°

Solubility: V. sol. H₂O (97g per 100cm³ at 20°; 160g per 100cm³ at 100°); spar. sol. EtOH; insol. Et₂O

Other Data: ΔH_f -649 kJ mol⁻¹. Dec. on heating with evolution of CO and H₂ and formation of Na₂C₂O₄ and Na₂CO₃ (300-450°)

Hazard & Toxicity: Irritant

Aldrich: 24759-6

Fluka: 71539

Sigma: F6502

Supelco: R41-1745

References:

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Radeglia, R., *J. Prakt. Chem.*, 1971, **312**, 887; *CA*, **74**, 118119, (*pmr*)

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