



>>Entry Name: Sodium arsenenite, 9CI

Synonym(s): Sodium arsenite, 8CI. Sodium metaarsenite. Arsenic sodium oxide (AsNaO₂). Arsenious acid (HAsO₂) sodium salt, 8CI

CAS Registry Number: 7784-46-5

Related CAS Registry Numbers(s): 17306-35-3

NaAsO₂

Molecular Formula: AsNaO₂

Molecular Weight: 129.91

Accurate Mass: 129.901191

Percentage Composition: As 57.67%; Na 17.70%; O 24.63%

Source/Synthesis: Synth. from AsO₃-NaOH melt

Use/Importance: Commercially available. Herbicide. Used in electroplating of coinage metals

Physical Description: Thin flakes (from melt)

Solubility: V. sol. H₂O; spar. sol. EtOH

Hazard & Toxicity: V. toxic

Aldrich: 40737-2

Fluka: 71287

Sigma: S7400

>>Derivative: Tetrahydrate

CAS Registry Number: 111373-27-4

Source/Synthesis: Synth. from Na₂O-As₂O₃-H₂O system at 6°

Other Data: The polymetaarsenite anion consists of doublets of single -(O-As)- chains with As-O 183.0-183.8 pm (chain), 171.2 pm (terminal)

>>Variant: Monomeric-form

Molecular Formula: AsNaO₂

Molecular Weight: 129.91

Accurate Mass: 129.901191

Percentage Composition: As 57.67%; Na 17.70%; O 24.63%

Source/Synthesis: Synth. by vaporisation of Na₂CO₃-As₂O₃ mixture

Other Data: May possess a 4-membered As(O)₂Na ring system

References:

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Wagner, C.D. *et al.*, *Anal. Chem.*, 1972, **44**, 967; 1980, **52**, 1445, (pe, Auger)

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