



>>Entry Name: Sodium sulfide (Na₂S₄), 8Cl

Synonym(s): Sodium tetrasulfide. Disodium tetrasulfide

CAS Registry Number: 12034-39-8

NaSSSSNa

Molecular Formula: Na₂S₄

Molecular Weight: 174.243

Accurate Mass: 173.867814

Percentage Composition: Na 26.39%; S 73.61%

Source/Synthesis: Synth. by direct reaction of stoichiometric quantities of Na₂S (or NaHS) with S or by addition of S to liq. NH₃ containing dissolved Na

Physical Description: Yellow tetragonal cryst., hygroscopic

Melting Point: Mp 286°

References:

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Oei, D.G., *Inorg. Chem.*, 1973, **12**, 435; 438, (Na-S phase diagram, synth, props)

Stendel, R., *J. Phys. Chem.*, 1976, **80**, 1516, (Raman, ir)

Brown, A.P., *Synth. React. Inorg. Met.-Org. Chem.*, 1984, **14**, 945, (synth)