



>>Entry Name: Sodium selenide (Na₂Se), 8Cl

Synonym(s): Disodium selenide

CAS Registry Number: 1313-85-5

Na₂Se

Molecular Formula: Na₂Se

Molecular Weight: 124.939

Accurate Mass: 125.896054

Percentage Composition: Na 36.80%; Se 63.20%

Source/Synthesis: Synth. from NaOEt + H₂Se in EtOH, under an H₂ atm., or from H₂Se + NaOH, or by directly heating sodium with powdered selenium (2:1 molar ratio) in polar solvs. (e.g. N-methylpyrrolidone)

Use/Importance: Reagent for synth. of aromatic selenium compds. by reaction with aromatic mono- or di-halides

Physical Description: Deliquescent red-white cubic cryst.

Other Data: ΔH_f° -265 kJ mol⁻¹

References:

Zintl, E. *et al.*, *Z. Elektrochem.*, 1934, **40**, 588, (*cryst struct*)

Holliman, F.G. *et al.*, *J.C.S.*, 1945, 37, (*synth*)

Wood, R.H., *J.A.C.S.*, 1958, **80**, 1559, (*synth, soly*)

Nofre, C. *et al.*, *C. R. Hebd. Seances Acad. Sci.*, 1963, **257**, 791, (*tox*)

Gmelin Handbook Inorg. Chem., Syst. No. 21, 1966, **3**, 1188, (*rev, bibl*)

U.S. Pat., 1986, 4 597 914; *CA*, **105**, 153747, (*synth, uses*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, SJT000