



>>Entry Name: Magnesium nitride (Mg₃N₂), 8Cl

CAS Registry Number: 12057-71-5

Mg₃N₂

Molecular Formula: Mg₃N₂

Molecular Weight: 100.928

Accurate Mass: 99.961274

Percentage Composition: Mg 72.24%; N 27.76%

Source/Synthesis: Prepd. by direct reaction of Mg powder with N₂

Physical Description: Green-yellow powder. Moisture-sensitive. Reacts with H₂O with evolution of NH₃

Other Data: $\Delta H_f^\circ -461 \text{ kJ mol}^{-1}$; $\Delta G_f^\circ -401 \text{ kJ mol}^{-1}$; $S^\circ 88 \text{ J K}^{-1} \text{ mol}^{-1}$

Aldrich: 41511-1

References:

Stackelberg, M.V. *et al.*, *Z. Phys. Chem., Abt. B*, 1933, **22**, 305, (*cryst struct*)

Brame, E.G. *et al.*, *J. Inorg. Nucl. Chem.*, 1957, **5**, 48, (*ir*)

David, J., *Rev. Chim. Miner.*, 1972, **9**, 717; *CA*, 1974, **80**, 90463, (*synth*)

Chase, M.W. *et al.*, *J. Phys. Chem. Ref. Data*, 1985, **14**, 1498, (*thermochem data*)