



>>Entry Name: Magnesium ethoxide

Synonym(s): Diethoxymagnesium. Ethanol magnesium salt, 9Cl. Ethyl alcohol magnesium salt, 8Cl

CAS Registry Number: 2414-98-4

Mg(OEt)₂

Molecular Formula: C₄H₁₀MgO₂

Molecular Weight: 114.427

Accurate Mass: 114.053122

Percentage Composition: C 41.99%; H 8.81%; Mg 21.24%; O 27.96%

Source/Synthesis: Prepd. by reaction of Mg with EtOH under strictly anhydrous conditions. Activators such as HgCl₂ can be used to promote reaction

Use/Importance: Commercially available. Catalyst for polym. of alkenes

Physical Description: Colourless moisture sensitive hexagonal cryst. Reacts with H₂O → EtOH + Mg(OH)₂. Calcination in air or under vacuum yields, without hydrolysis, MgO

Melting Point: Mp 300°

Solubility: Sol. EtOH; insol. C₆H₆; insol. THF

Hazard & Toxicity: Flammable, fl. p. >43°

Aldrich: 29184-6

Fluka: 63055

Other: Gelest AKM500

References:

Turova, N.Ya. *et al.*, *Izv. Akad. Nauk SSSR, Neorg. Mater.*, 1967, **3**, 1435, (*struct*)

Lutz, H.D., *Z. Anorg. Allg. Chem.*, 1968, **356**, 132, (*ir*)

Dongare, M.K. *et al.*, *Thermochim. Acta*, 1982, **57**, 37, (*dta*)

Hattori, T. *et al.*, *J. Mater. Sci. Lett.*, 1983, **2**, 504, (*synth, calcination*)

Eur. Pat., 1986, 186 294; *CA*, **105**, 136473, (*synth*)

Sigma-Aldrich Library of Chemical Safety Data, 1988, **2**, 2179A