



>>Entry Name: Magnesium trifluoromethanesulfonate

Synonym(s): Trifluoromethanesulfonic acid, magnesium salt, 8Cl. Magnesium triflate

CAS Registry Number: 60871-83-2

Mg(OSO₂CF₃)₂

Molecular Formula: C₂F₆MgO₆S₂

Molecular Weight: 322.446

Accurate Mass: 321.88909

Percentage Composition: C 7.45%; F 35.35%; Mg 7.54%; O 29.77%; S 19.89%

Source/Synthesis: Obt. by careful neutralisation of a suspension of MgCO₃ in MeOH or CH₂Cl₂ by F₃CSO₃H

Use/Importance: Commercially available. Polymer electrolyte component. Initiator of cationic polym. Thioketalisation catalyst. Accelerator for epoxy-resin hardening

Physical Description: Hygroscopic white powder (MeOH)

Other Data: Magnesium bronzes (Mg_xV₂O₅) are formed by the electrochemical redn. of V₂O₅ at 150° in Mg(OSO₂CF₃)₂ solns. in dimethylsulfone or sulfolane

Aldrich: 33798-6

Fluka: 63146

References:

Fujinaga, T. *et al.*, *J. Electroanal. Chem. Interfacial Electrochem.*, 1976, **73**, 235, (*electrolyte*)

Ger. Pat., 1977, 2 647 377; *CA*, **87**, 54079, (*uses*)

Collomb, J. *et al.*, *Eur. Polym. J.*, 1980, **16**, 1135, (*uses*)

Collomb, J. *et al.*, *CA*, 1983, **99**, 123000, (*uses*)

Corey, E.J. *et al.*, *Tet. Lett.*, 1983, **24**, 169, (*synth, catalyst*)

Pereira-Ramos, J.P. *et al.*, *J. Electroanal. Chem. Interfacial Electrochem.*, 1987, **218**, 241, (*bronze formn*)

Gilmour, A. *et al.*, *Proc. Electrochem. Soc.*, 1989, **89-4**, 358, (*electrolyte*)