



>>Entry Name: Gallium(*III*) trifluoromethanesulfonate

Synonym(s): Tris(trifluoromethanesulfonato)gallium

CAS Registry Number: 74974-60-0

$\text{Ga}(\text{OSO}_2\text{CF}_3)_3$

Molecular Formula: $\text{C}_3\text{F}_9\text{GaO}_9\text{S}_3$

Molecular Weight: 516.934

Accurate Mass: 515.781652

Percentage Composition: C 6.97%; F 33.08%; Ga 13.49%; O 27.86%; S 18.61%

General Statement: Oligomeric in most solvs.

Source/Synthesis: Synth. from GaX_3 (X = Br or Cl) and $\text{CF}_3\text{SO}_3\text{H}$

Use/Importance: Friedel-Crafts catalyst

Physical Description: High melting white solid

Solubility: Spar. sol. non polar solvs. Sol. diglyme, MeCN, Me_2CO , CH_2Cl_2

References:

Olah, G.A., *J.A.C.S.*, 1988, **110**, 2560

U.S. Pat., 1988, 4 721 559; *CA*, **109**, 57031, (*use*)