



>>Entry Name: ***N*-Methyl-*N*-(trimethylsilyl)trifluoroacetamide**

Synonym(s): 2,2,2-Trifluoro-*N*-methyl-*N*-(trimethylsilyl)acetamide. MSTFA

CAS Registry Number: 24589-78-4

$\text{F}_3\text{CCONMeSiMe}_3$

Molecular Formula: $\text{C}_6\text{H}_{12}\text{F}_3\text{NOSi}$

Molecular Weight: 199.248

Accurate Mass: 199.064025

Percentage Composition: C 36.17%; H 6.07%; F 28.61%; N 7.03%; O 8.03%; Si 14.10%

Source/Synthesis: Synth. from $\text{F}_3\text{CCONHMe} + \text{Me}_3\text{SiCl}$

Use/Importance: Silylation reagent for gc anal. of amines and alcohols

Physical Description: Liq.

Boiling Point: Bp_{760} 131.5°

Hazard & Toxicity: Flammable, fl. p. 25°. Irritant

Aldrich: 39486-6

Fluka: 69479

Sigma: M7891

References:

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Donicke, M., *J. Chromatogr.*, 1969, **42**, 103; 1975, **115**, 591, (*use*)

Birkofer, L. *et al.*, *Chem. Ber.*, 1971, **104**, 3831, (*synth*)

Donicke, M., *Fresenius' Z. Anal. Chem.*, 1976, **279**, 128, (*use, rev*)

Bassindale, A.R. *et al.*, *J. Organomet. Chem.*, 1979, **175**, 273, (*tautomerism*)

Ende, M. *et al.*, *Tetrahedron*, 1984, **40**, 5167, (*props*)

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Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials, 8th edn.*, Van Nostrand Reinhold, 1992, MQG750