>>**Entry Name: Girard's reagent T**
Synonym(s): 2-Hydrazino-*N,N,N*-trimethyl-2-oxoethanaminium, $_{9Cl}$. (Carboxymethyl)trimethylammonium hydrazide, $_{8Cl}$

$Me_3N^{(+)}CH_2CONHNH_2$

Molecular Formula: $C_5H_{14}N_3O^{(+)}$
Molecular Weight: 132.185
Accurate Mass: 132.113687
Percentage Composition: C 45.43%; H 10.67%; N 31.79%; O 12.10%
Use/Importance: Reagent for forming water-sol. derivs. with carbonyl compds., used esp. in isoln. of steroids
pKa Value: pK_a 2.09

>>**Derivative:** Chloride

CAS Registry Number: 123-46-6
Molecular Formula: $C_5H_{14}ClN_3O$
Molecular Weight: 167.638
Accurate Mass: 167.082539
Percentage Composition: C 35.82%; H 8.42%; Cl 21.15%; N 25.07%; O 9.54%
Physical Description: Needles
Melting Point: Mp 192 sl. dec.°
Other Data: V. hygroscopic

Aldrich: G90-0
Fluka: 48930
Sigma: C1757

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 1255A, *(nmr)*
Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 768C, *(ir)*
Girard, A. *et al.*, *Helv. Chim. Acta*, 1936, **19**, 1095, *(synth)*
Org. Synth., Coll. Vol., 2, 1943, 85, *(synth)*
Wheeler, O.H., *Chem. Rev.*, 1962, **62**, 205, *(rev)*
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1967, **1**, 410
Wheeler, O.H., *J. Chem. Educ.*, 1968, **45**, 435, *(rev)*