



>>Entry Name: Pentamethylguanidine, 9CI

CAS Registry Number: 13439-84-4

$(\text{Me}_2\text{N})_2\text{C}=\text{NMe}$

Molecular Formula: $\text{C}_6\text{H}_{15}\text{N}_3$

Molecular Weight: 129.205

Accurate Mass: 129.126597

Percentage Composition: C 55.78%; H 11.70%; N 32.52%

Use/Importance: Useful etherification and esterification catalyst (together with other pentaalkylguanidines)

Physical Description: Liq.

Boiling Point: Bp 155-160°

Solubility: Sol. H_2O

Other Data: V. hygroscopic; strong base, absorbs CO_2 from air

>>Derivative: Picrate

Physical Description: Yellow needles (H_2O)

Melting Point: Mp 165-166 dec.°

References:

Schenck, M., *Hoppe Seyler's Z. Physiol. Chem.*, 1912, **77**, 328

Lecher, H. *et al.*, *Ber.*, 1923, **56**, 1329, (synth)

Barcelo, G. *et al.*, *Tetrahedron*, 1990, **46**, 1839, (use)