



>>Entry Name: Di-*tert*-butyldiazene

Synonym(s): 1,2-Bis(1,1-dimethylethyl)diazene. Azobis(1,1-dimethylethane). Azo-*tert*-butane. 2,2'-Azoisobutane

CAS Registry Number: 927-83-3

$(\text{H}_3\text{C})_3\text{CN}=\text{NC}(\text{CH}_3)_3$

Molecular Formula: $\text{C}_8\text{H}_{18}\text{N}_2$

Molecular Weight: 142.244

Accurate Mass: 142.146998

Percentage Composition: C 67.55%; H 12.75%; N 19.69%

Use/Importance: Photolytic radical source

Boiling Point: Bp 109-110°. Bp₈₀ 47-50°

Aldrich: 45210-6

>>Derivative: *N,N'*-Dioxide

Molecular Formula: $\text{C}_8\text{H}_{18}\text{N}_2\text{O}_2$

Molecular Weight: 174.242

Accurate Mass: 174.136828

Percentage Composition: C 55.15%; H 10.41%; N 16.08%; O 18.36%

Physical Description: Cryst.

Melting Point: Mp 70-71°

References:

Blackham, A.U. *et al.*, *J.A.C.S.*, 1962, **84**, 2922, (*synth*)

Mill, T. *et al.*, *Tet. Lett.*, 1969, 1853, (*isom*)

Org. Synth., 1972, **52**, 11, (*synth*)

Timberlake, J.W. *et al.*, *J.A.C.S.*, 1973, **95**, 634, (*synth*)

Blackham, A.U. *et al.*, *J. Electrochem. Soc.*, 1975, **122**, 1081, (*synth*)

Corey, E.J. *et al.*, *Tet. Lett.*, 1984, **25**, 291