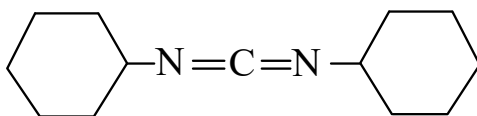




>>Entry Name: Dicyclohexylcarbodiimide, 8Cl

Synonym(s): *N,N'*-Methanetetraylbiscyclohexanamine, 9Cl. DCC



CAS Registry Number: 538-75-0

Molecular Formula: C₁₃H₂₂N₂

Molecular Weight: 206.33

Accurate Mass: 206.178298

Percentage Composition: C 75.68%; H 10.75%; N 13.58%

Use/Importance: Dehydrating agent esp. as coupling agent in peptide and ester synth. Used for photometric detn. of carboxylic acids; detn. of carboxylic acids in tlc

Physical Description: Cryst.

Melting Point: Mp 35-36°

Boiling Point: Bp₁₁ 154-156°. Bp_{0.5} 98-100°

Hazard & Toxicity: Severe eye, skin and respiratory tract irritant. Skin sensitiser

Aldrich: 37911-5

Fluka: 36652

Sigma: D3128

>>Derivative: Dimer

see *N,N'*-(1,3-Dicyclohexyl-1,3-diazetidene-2,4-diylidene)biscyclohexanamine, NVX72-J

References:

- Aldrich Library of FT-IR Spectra*, 1st edn., 1985, **1**, 876C, (*ir*)
Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 1413B, (*nmr*)
Aldrich Library of FT-IR Spectra: Vapor Phase, 1989, **3**, 829B, (*ir*)
Schmidt, E. *et al.*, *Ber.*, 1938, **71**, 1933, (*synth*)
Stevens, C.L. *et al.*, *J.O.C.*, 1967, **32**, 2895, (*synth*)
Bestmann, H.J. *et al.*, *Annalen*, 1968, **718**, 24, (*synth, bibl*)
Bushweller, C.H. *et al.*, *J.O.C.*, 1970, **35**, 276, (*pmr*)
Tanimura, T. *et al.*, *Chem. Pharm. Bull.*, 1972, **20**, 1845, (*use, tlc*)
Pesez, M. *et al.*, *Talanta*, 1974, **21**, 1306, (*use*)
Kasai, Y. *et al.*, *Anal. Chem.*, 1975, **47**, 34, (*use*)
Anet, F.A.L. *et al.*, *Org. Magn. Reson.*, 1976, **8**, 327, (*cmr*)
Rich, D.H. *et al.*, *Pept., Proc. Eur. Pept. Symp., 14th*, 1976, **1**, 241, (*rev, use*)
Mogul, P.H. *et al.*, *Spectrosc. Lett.*, 1977, **10**, 959, (*ir, uv*)
Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1982, **10**, 142; **11**, 125; **16**, 128; **14**, 131; **15**, 149; **11**, 173; **13**, 333, (*use*)
Luxon, S.G., *Hazards in the Chemical Laboratory*, 5th edn., Royal Society of Chemistry, 1992, 440