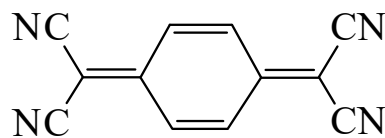




>>Entry Name: Tetracyanoquinodimethane

Synonym(s): 2,2'-(2,5-Cyclohexadiene-1,4-diylidene)bispropanedinitrile, 9Cl. 2,5-Cyclohexadiene- $\Delta^{1,\alpha:4,\alpha'}$ -dimalononitrile, 8Cl. 3,6-Bis(dicyanomethylene)-1,4-cyclohexadiene. TCNQ



CAS Registry Number: 1518-16-7

Related CAS Registry Numbers(s): 1283-90-5 11119-04-3 12153-58-1 12153-61-6 12153-63-8 12261-34-6 34504-21-7 34507-61-4

Molecular Formula: C₁₂H₄N₄

Molecular Weight: 204.19

Accurate Mass: 204.043596

Percentage Composition: C 70.59%; H 1.97%; N 27.44%

Use/Importance: π -Acid complexing agent. Reagent for spectrophotometric anal. of amines. Used as a 0.5% soln. of Li or NH₄ salt in aq. EtOH as colour reagent in tlc of cations

Physical Description: Rust cryst. (MeCN or THF)

Boiling Point: Subl. 293.5-296°

Aldrich: 15763-5

Fluka: 87126

Sigma: T1636

>>Derivative: Compd. with anthracene (1:1)

CAS Registry Number: 1704-37-6

Physical Description: Black needles

Boiling Point: Subl. 282-283°

>>Derivative: Tetrathiafulvalene complex

Synonym(s): Tetrathiafulvalene-tetracyanoquinodimethane. TTF-TCNQ

CAS Registry Number: 40210-84-2

Use/Importance: Charge-transfer complex

Physical Description: Shiny black needles

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 845B, (*ir*)

Acker, D.S. *et al.*, *J.A.C.S.*, 1962, **84**, 3370, (*synth*)

Druding, L.F. *et al.*, *Anal. Chem.*, 1963, **35**, 1582, (*use*)

Inorg. Synth., 1979, **19**, 32, (*synth, complex*)

Govers, H.A.J., *Acta Cryst. A*, 1982, **38**, 557, (*cryst struct*)

Obtemperanskaya, S.I. *et al.*, *Zh. Anal. Khim.*, 1982, **37**, 1894; *CA*, **98**, 118896y, (*use*)

Crawford, R.J., *J.O.C.*, 1983, **48**, 1366, (*synth*)

Yamaguchi, S. *et al.*, *Bull. Chem. Soc. Jpn.*, 1989, **62**, 3036, (*synth*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, TBW750