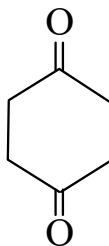




>>Entry Name: 1,4-Cyclohexanedione, 9CI



CAS Registry Number: 637-88-7

Molecular Formula: C₆H₈O₂

Molecular Weight: 112.128

Accurate Mass: 112.05243

Percentage Composition: C 64.27%; H 7.19%; O 28.54%

Physical Description: Plates (H₂O)

Melting Point: Mp 78°

Aldrich: 12542-3

Fluka: 29070

Sigma: C1529

>>Derivative: Dioxime

CAS Registry Number: 10220-83-4

Molecular Formula: C₆H₁₀N₂O₂

Molecular Weight: 142.157

Accurate Mass: 142.074228

Percentage Composition: C 50.69%; H 7.09%; N 19.71%; O 22.51%

Physical Description: Cryst. (H₂O)

Melting Point: Mp 188°

>>Derivative: Disemicarbazone

Melting Point: Mp 231°

>>Derivative: Dithiosemicarbazone

Synonym(s): 2,2'-(1,4-Cyclohexanediyldiene)bishydrazinecarbothioamide, 9CI

CAS Registry Number: 83454-03-9

Molecular Formula: C₈H₁₄N₆S₂

Molecular Weight: 258.371

Accurate Mass: 258.072134

Percentage Composition: C 37.19%; H 5.46%; N 32.53%; S 24.82%

Use/Importance: Used as 0.1% DMF soln. for photometric detn. of Cu ($\lambda_{\max}$ 410 nm, pH 6, DMF aq.)

Physical Description: Cryst. (DMF)

Melting Point: Mp 213-214 dec.°

Solubility: Sol. DMF; spar. sol. H₂O, EtOH, 4-methyl-2-pentanone, CHCl₃

pKa Value: pK_{a1} 11.3

>>Derivative: Bis-2,4-dinitrophenylhydrazone

Physical Description: Yellow cryst. (PhNO₂)

Melting Point: Mp 240°

>>Derivative: Ethylene monoketal

Synonym(s): 1,4-Dioxaspiro[4.5]decan-8-one

CAS Registry Number: 4746-97-8

Molecular Formula: C₈H₁₂O₃

Molecular Weight: 156.181

Accurate Mass: 156.078645

Percentage Composition: C 61.52%; H 7.74%; O 30.73%

Melting Point: Mp 71-72°

Aldrich: 27487-9

Fluka: 29090