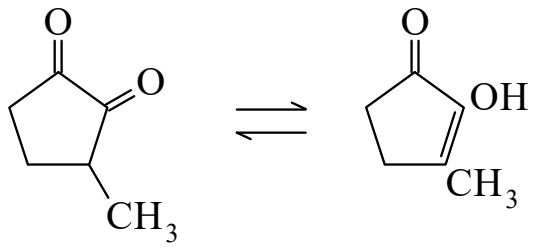
>>**Entry Name: 3-Methyl-1,2-cyclopentanedione,** 9CI
ENTRY UNDER REVIEW
Synonym(s): Cyclotene. Corylone. FEMA 2700



CAS Registry Number: 765-70-8

Molecular Formula: $C_6H_8O_2$
Molecular Weight: 112.128
Accurate Mass: 112.05243
Percentage Composition: C 64.27%; H 7.19%; O 28.54%

Biological Source: Constit. of coffee and many other foods. Comly. obt. by isoln. from beechwood tar
Use/Importance: Important flavouring ingredient. Occasionally used as an intensifier in perfumery. Enol-form predominates in non-polar solvs. and solid state
Physical Description: Cryst. + $2H_2O$ with caramel odour
Melting Point: Mp 78-79° (hydrate). Mp 106.5-107° (anhyd.)

Aldrich: 17850-0
Fluka: 66550

>>**Derivative:** Dihydrazone

Molecular Formula: $C_6H_{12}N_4$
Molecular Weight: 140.188
Accurate Mass: 140.106196
Percentage Composition: C 51.41%; H 8.63%; N 39.97%
Melting Point: Mp 143°

>>**Derivative:** Dioxime

CAS Registry Number: 41330-47-6
Molecular Formula: $C_6H_{10}N_2O_2$
Molecular Weight: 142.157
Accurate Mass: 142.074228
Percentage Composition: C 50.69%; H 7.09%; N 19.71%; O 22.51%
Melting Point: Mp 148-149 dec.°

>>**Derivative:** Bisemicarbazone

Melting Point: Mp 280°

>>**Derivative:** Bis(thiosemicarbazone)
Synonym(s): 2,2'-(3-Methyl-1,2-cyclopentanediylidene)bishydrazinecarbothioamide, 9CI

CAS Registry Number: 15899-61-3

Molecular Formula: $C_8H_{14}N_6S_2$
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 0.06% soln. in DMF/Me_2CO for photometric detn. of Zn (λ_{max} 415 nm, ε 10000), Bi (λ_{max} 420 nm, ε 11000), Cd, Hg, Cu, Co; as soln. in EtOH for photometric detn. of Pb and Ag (λ_{max} 430 nm, ε 10000, pH8)
Physical Description: Yellow cryst.
Melting Point: Mp 240°
Solubility: Sol. EtOH, $CHCl_3$, DMF, Me_2CO

>>**Variant:** Enol-form
Synonym(s): 2-Hydroxy-3-methyl-2-cyclopenten-1-one