>>**Entry Name: 2,4-Cyclopentadien-1-ylsodium,** 9CI
Synonym(s): Sodium cyclopentadienide

CAS Registry Number: 4984-82-1

Molecular Formula: C_5H_5Na
Molecular Weight: 88.084
Accurate Mass: 88.028892
Percentage Composition: C 68.18%; H 5.72%; Na 26.10%
General Statement: Multidecker struct. in the solid state with each metal atom linearly coord. by two η^5-bonded Cp rings
Source/Synthesis: Synth. from CpH and Na or NaH
Use/Importance: Reagent for synth. of cyclopentadienyl compds. Adds to pyrylium salts. Substitutes esters, carbonates; substitutes allyl acetates in the presence of $Pd(dppe)_2$
Physical Description: Colourless cryst.
Solubility: Sol. ethers
Other Data: Forms complexes with ethers, amines. Dec. >300°
Hazard & Toxicity: Pyrophoric in air

Aldrich: 30402-6
Fluka: 29675

>>**Derivative:** TMED complex

CAS Registry Number: 59828-67-0
Molecular Formula: $C_{11}H_{21}N_2Na$
Molecular Weight: 204.29
Percentage Composition: C 64.67%; H 10.36%; N 13.71%; Na 11.25%
Physical Description: Plates (C_6H_6)
Melting Point: Mp 135-138°
Solubility: Sol. THF; spar. sol. C_6H_6, toluene

>>**Derivative:** DME complex

CAS Registry Number: 62228-16-4
Molecular Formula: $C_9H_{15}NaO_2$
Molecular Weight: 178.206
Percentage Composition: C 60.66%; H 8.48%; Na 12.90%; O 17.96%
Source/Synthesis: Synth. from CpH and Na in DME
Physical Description: White powder
Solubility: Sol. THF; insol. toluene
Other Data: Less air-sensitive and more easily handled than uncomplexed CpNa

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