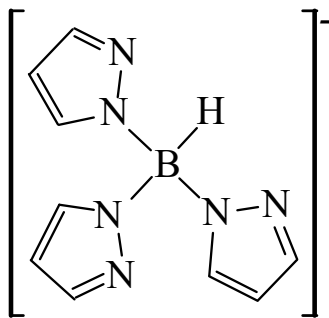




>>Entry Name: Hydrotris(1*H*-pyrazolato-*N*¹)borate(1⁻), 10Cl, 9Cl



CAS Registry Number: 46755-84-4

Molecular Formula: C₉H₁₀BN₆⁽⁻⁾

Molecular Weight: 213.029

Accurate Mass: 213.105999

Percentage Composition: C 50.74%; H 4.73%; B 5.07%; N 39.45%

Use/Importance: Used in metal complex formn.

>>Derivative: Li salt

Synonym(s): Lithium hydrotris(1-pyrazolyl)borate

CAS Registry Number: 18583-61-4

Molecular Formula: C₉H₁₀BLiN₆

Molecular Weight: 219.97

Accurate Mass: 220.122002

Percentage Composition: C 49.14%; H 4.58%; B 4.91%; Li 3.16%; N 38.21%

Source/Synthesis: Synth. by addn. of LiBH₄ to molten pyrazole at 180-210°

Physical Description: Colourless needles (toluene)

Melting Point: Mp 265°

Boiling Point: Subl.₂ 240°

Solubility: V. sol. H₂O, Me₂CO, EtOH, MeOH, THF; sol. CHCl₃; spar. sol. toluene

>>Derivative: Na salt

Synonym(s): Sodium hydrotris(1-pyrazolyl)borate

CAS Registry Number: 18583-62-5

Molecular Formula: C₉H₁₀BN₆Na

Molecular Weight: 236.019

Accurate Mass: 236.095766

Percentage Composition: C 45.80%; H 4.27%; B 4.58%; N 35.61%; Na 9.74%

Source/Synthesis: Prepd. by addn. of NaBH₄ to molten pyrazole at 180-210°

Physical Description: Moisture-sensitive colourless cryst. (DME or by subl.)

Melting Point: Mp 222-223°

Boiling Point: Subl.₂ 210-215°

Solubility: Sol. DMF, DMSO, MeCN

Aldrich: 36923-3

Fluka: 72059

>>Derivative: K salt

Synonym(s): Potassium hydrotris(1-pyrazolyl)borate

CAS Registry Number: 18583-60-3

Molecular Formula: C₉H₁₀BKN₆

Molecular Weight: 252.127

Accurate Mass: 252.069706

Percentage Composition: C 42.87%; H 4.00%; B 4.29%; K 15.51%; N 33.33%

Source/Synthesis: Prepd. by addn. of KBH₄ to molten pyrazole at 180-210°

Physical Description: Colourless fine needles (anisole)

Melting Point: Mp 189°

Solubility: V. sol. H₂O, alcohols; sol. DMF, DMSO, MeCN

Other Data: Stable as solid but dec. slowly in soln. Reactions should be carried out on freshly prepd. solns.

References: