



>>Entry Name: Hexakis(cyano-C)ferrate(4-), 11Cl

ENTRY UNDER REVIEW

Synonym(s): Hexacyanoferrate(II)(4-). Ferrocyanide

CAS Registry Number: 13408-63-4

Related CAS Registry Numbers(s): 25869-98-1 38670-32-5

$[\text{Fe}(\text{CN})_6]^{4(-)} (O_h)$

Molecular Formula: $\text{C}_6\text{FeN}_6^{4(-)}$

Molecular Weight: 211.953

Accurate Mass: 211.953383

Percentage Composition: C 34.00%; Fe 26.35%; N 39.65%

Solubility: Alkali and alkaline earth (except Ba) salts sol. H_2O ; insol. EtOH

Other Data: Low spin Fe^{II} but crosses over to high spin at 2×10^5 atm. pressure

>>Derivative: Tetra-H compd.

Synonym(s): Ferrocyanic acid

CAS Registry Number: 17126-47-5

Molecular Formula: $\text{C}_6\text{H}_4\text{FeN}_6$

Molecular Weight: 215.985

Accurate Mass: 215.984683

Percentage Composition: C 33.37%; H 1.87%; Fe 25.86%; N 38.91%

Physical Description: White powder turning blue in moist air

Solubility: Sol. H_2O , EtOH

Other Data: Strong acid; dec. on heating

>>Derivative: Tetra-Na salt

Synonym(s): Sodium ferrocyanide

CAS Registry Number: 13601-19-9

Molecular Formula: $\text{C}_6\text{FeN}_6\text{Na}_4$

Molecular Weight: 303.912

Accurate Mass: 303.912451

Percentage Composition: C 23.71%; Fe 18.38%; N 27.65%; Na 30.26%

Other Data: Becomes anhyd. at 81°

>>Derivative: Tetra-Na salt, decahydrate

Synonym(s): Yellow prussiate of soda

CAS Registry Number: 14434-22-1

Extra CAS Registry Numbers(s): 59299-99-9

Physical Description: Pale yellow monoclinic cryst.

Melting Point: Mp 82° (anhyd.)

Solubility: V. sol. H_2O

Other Data: Sl. efflorescent. Dehydrates above 50° and becomes anhyd. at 81.5° ; dec. at 435°

>>Derivative: Tetra-K salt

Synonym(s): Potassium ferrocyanide

CAS Registry Number: 13943-58-3

Molecular Formula: $\text{C}_6\text{FeK}_4\text{N}_6$

Molecular Weight: 368.346

Accurate Mass: 367.808211

Percentage Composition: C 19.56%; Fe 15.16%; K 42.46%; N 22.82%