>>**Entry Name: Hexaamminecobalt(*III*)(3+),** 10Cl

CAS Registry Number: 14695-95-5
Related CAS Registry Numbers(s): 18459-96-6
$[Co(NH_3)_6]^{3(+)}$ (O_h)

Molecular Formula: $CoH_{18}N_6^{3(+)}$
Molecular Weight: 161.116
Accurate Mass: 161.092492
Percentage Composition: Co 36.58%; H 11.26%; N 52.16%

>>**Derivative:** Trichloride
Synonym(s): Hexaamminecobalt(*III*) chloride. Cobalt(*III*) chloride hexaammine

CAS Registry Number: 10534-89-1
Molecular Formula: $Cl_3CoH_{18}N_6$
Molecular Weight: 267.474
Accurate Mass: 265.999048
Percentage Composition: Cl 39.76%; Co 22.03%; H 6.78%; N 31.42%
Use/Importance: Commercially available
Physical Description: Reddish brown cryst.
Solubility: Sol. H_2O
Aldrich: 20309-2
Fluka: 52740
Sigma: H8887

>>**Derivative:** Triiodide
Synonym(s): Hexaamminecobalt(*III*) iodide. Cobalt(*III*) iodide hexaammine

CAS Registry Number: 18372-69-5
Molecular Formula: $CoH_{18}I_3N_6$
Molecular Weight: 541.829
Accurate Mass: 541.805911
Percentage Composition: Co 10.88%; H 3.35%; I 70.26%; N 15.51%

>>**Derivative:** Trinitrate

CAS Registry Number: 10534-86-8
Physical Description: Yellow prisms

>>**Derivative:** Tris(trifluoroacetate)

CAS Registry Number: 59561-55-6
Use/Importance: Used in photothermographic imaging compositions

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1302A, *(ir)*
Linhard, M.*, Z. Elektrochem.*, 1944, **50**, 224, *(uv)*
Inorg. Synth., 1946, **2**, 217, *(synth, props)*
Brauer, G.*, Handb. Prep. Inorg. Chem., 2nd edn., Academic Press*, 1965, **2**, 1526, *(nitrate, synth)*
Kime, N.E. *et al.*, *Acta Cryst. B*, 1969, **25**, 168, *(synth, cryst struct)*
Gowda, H. *et al.*, *Acta Cryst. A*, 1970, **26**, 483-488, *(nitrate, cryst struct)*
Kruger, G.J. *et al.*, *Acta Cryst. B*, 1978, **34**, 915, *(struct)*