>>**Entry Name: Pentachlorozincate(3–)**

CAS Registry Number: 51018-44-1
Related CAS Registry Numbers(s): 33724-09-3
$[ZnCl_5]^{3(-)}$

Molecular Formula: $Cl_5Zn^{3(-)}$
Molecular Weight: 242.654
Accurate Mass: 238.773405

>>**Derivative:** Tri-Rb salt

CAS Registry Number: 38257-10-2
Molecular Formula: Cl_5Rb_3Zn
Molecular Weight: 499.057
Accurate Mass: 493.508787
Percentage Composition: Cl 35.52%; Rb 51.38%; Zn 13.10%
Physical Description: Cryst.

>>**Derivative:** Tri-Cs salt

CAS Registry Number: 20833-37-8
Molecular Formula: Cl_5Cs_3Zn
Molecular Weight: 641.37
Accurate Mass: 637.489692
Percentage Composition: Cl 27.64%; Cs 62.17%; Zn 10.20%
Source/Synthesis: Obtd. from fused CsCl and $Cs_2Zn_2Cl_4$
Physical Description: Cryst.
Melting Point: Mp 560°
Other Data: Isomorphous with Cs_2CoCl_5 and Cs_3ZnI_5

>>**Derivative:** Bis(diethylenetriamine)chromium(3+) salt

CAS Registry Number: 108786-83-0
Molecular Formula: $C_8H_{26}Cl_5CrN_6Zn$
Molecular Weight: 500.983
Accurate Mass: 496.935808
Percentage Composition: C 19.18%; H 5.23%; Cl 35.38%; Cr 10.38%; N 16.78%; Zn 13.05%
Physical Description: Lemon-yellow cryst. +½ H_2O
Solubility: V. sol. H_2O, dil. acids; sol. DMF; insol. 2-propanol, Et_2O

>>**Derivative:** Hexaamminecobalt(3+) salt

CAS Registry Number: 25969-32-8
Physical Description: Orange cryst.
Other Data: Salt made up of $[Co(NH_3)_6]^{3(+)}$, $Cl^{(-)}$ and $ZnCl_4^{2(-)}$ (v. distorted tetrahedron)

>>**Derivative:** Tri-NH_4 salt

CAS Registry Number: 14639-98-6
Use/Importance: Used in soldering fluxes; fire retardant
Physical Description: White cryst.
Other Data: Salt made up of $NH_4^{(+)}$, $Cl^{(-)}$ and $ZnCl_4^{(-)}$ (regular tetrahedron) ions. Dec. to $ZnCl_2$ via $[NH_4]_2[ZnCl_4]$

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