

Angewandte Addendum

It was called to the attention of the correspondence authors of this communication that the statement “Adducts of an electronegative central anion, such as Cl^- , with halogen molecules, such as I_2 , attached, are not known.” should not be maintained. Indeed, $[\text{Cl}(\text{I}_2)_4]^-$ contains the linear anion $[\text{Cl}(\text{I}_2)]^-$ which has been observed apparently for the first time in the crystal structure of $(\text{Phen})_2[[\text{Cl}_2\text{I}][\text{ClI}_2]]$.^[1] The isolated anion $[\text{Cl}(\text{I}_2)_4]^-$ may also be cut out of the anionic network in the crystal structure of $[(\text{Ph})_3\text{PCl}]_2[\text{Cl}_2\text{I}_{14}]$.^[2] However, the “anion” $[\text{Cl}_2\text{I}_{14}]^{2-} \rightarrow [\text{ClI}_7]^-$, better written as $[\{\text{Cl}(\text{I}_2)_{4/2}(\text{I}_2)\}(\text{I}_2)_{1/2}]^-$, contains the tetragonal pyramid $\{\text{Cl}(\text{I}_2)_{4/2}(\text{I}_2)\}$, whose not exactly planar base $\text{Cl}(\text{I}_2)_4$ is connected with further $[\text{Cl}(\text{I}_2)_4]$ units. Synthesis and crystal structure of $[(\text{H}_5\text{O}_2)\text{I}_2\text{bI}5\text{c}5]_2[\text{Cl}(\text{I}_2)_4]$ are, by the way, taken from Ref. [3].

Iodine–Iodine Bonding makes
Tetra(diiodine)chloride, $[\text{Cl}(\text{I}_2)_4]^-$, Planar

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