A hydrogen-bonded chloride-hydrate assembly $\{(H_2O)_4Cl_2\}^2-$ has been ion-countered by the complex cations $[Fe(9\text{aneS}_3)_2]^{2+}$ ($9\text{aneS}_3 = 1,4,7$-trithiacyclononane). In $\{(H_2O)_4Cl_2\}^2-$, four water molecules and two chloride ions are self-assembled to form a one-dimensional supramolecular array of O–H···O and O–H···Cl hydrogen bonding, which consists of fused four- and six-membered rings. The discrete cation $[Fe(9\text{aneS}_3)_2]^{2+}$ has a nearly regular octahedral FeS$_6$ core with an average Fe–S bond length of 2.2586(5) Å.

Key words: Supramolecular Chemistry, Hydrogen Bond, Chloride-Hydrate, Self-Assembly, Iron(II) Complex