The reaction of equimolar quantities of GeCl₂ · dioxane with [BzEt₃N]⁺ Cl⁻ in tetrahydro-naphthaline gives high yields of [BzEt₃N]⁺ [GeCl₃]⁻. The asymmetric unit of the monoclinic single crystals (from CH₂Cl₂, space group P2₁/c, Z = 8) are comprising two pairs of crystallographically independent cations and anions, each with very similar molecular dimensions. The isolated [GeCl₃]⁻ anions have a trigonal pyramidal structure with narrow Cl-Ge-Cl angles in the range from 93.41(5) to 98.27(5)° and Ge-Cl distances between 2.293(2) and 2.305(2) Å. This structure is thus very similar to that of the isoelectronic AsCl₃ molecule and of the [SeCl₃]⁺ cation.

* Reprint requests to Prof. Dr. H. Schmidbaur.