A toroidal affine Nash group is the affine Nash group analogue of an anti-affine algebraic group. In this note, we prove analogues of Rosenlicht’s structure and decomposition theorems: (1) Every affine Nash group $G$ has a smallest normal affine Nash subgroup $H$ such that $G/H$ is an almost linear affine Nash group, and this $H$ is toroidal. (2) If $G$ is a connected affine Nash group, then there exist a largest toroidal affine Nash subgroup $G_{\text{ant}}$ and a largest connected, normal, almost linear affine Nash subgroup $G_{\text{aff}}$. Moreover, we have $G = G_{\text{ant}}G_{\text{aff}}$, and $G_{\text{ant}} \cap G_{\text{aff}}$ contains $(G_{\text{ant}})_{\text{aff}}$ as an affine Nash subgroup of finite index.

**Keywords:** Real algebraic groups, anti-affine algebraic groups, Rosenlicht’s theorem, affine Nash groups, abelian groups.

**MSC:** 22E15, 14L10, 14P20