

Experiment No. (9)

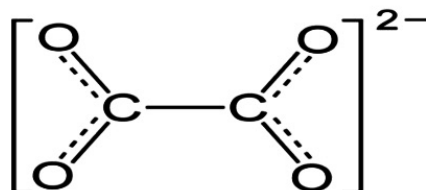
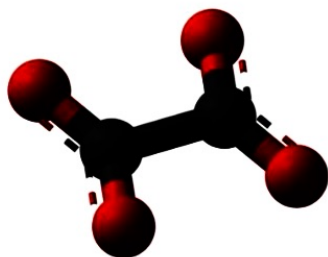
Preparation of Potassium TrisOxalato Aluminate (III)

Trihydrate $\text{K}_3[\text{Al}(\text{C}_2\text{O}_4)_3] \cdot 3\text{H}_2\text{O}$

Aluminium (or **aluminum**; see different endings) is a chemical element in the boron group with symbol **Al** and atomic number 13. It is a silvery-white, soft, nonmagnetic, ductile metal. Aluminium is the third most abundant element (after oxygen and silicon) in the Earth's crust, and the most abundant metal there. It makes up about 8% by mass of the crust, though it is less common in the mantle below. Aluminium metal is so chemically reactive that native specimens are rare and limited to extreme reducing environments. Instead, it is found combined in over 270 different minerals.^[7] The chief ore of aluminium is bauxite.

Aluminium is remarkable for the metal's low density and for its ability to resist corrosion due to the phenomenon of passivation. Structural components made from aluminium and its alloys are vital to the aerospace industry and are important in other areas of transportation and structural materials, such as building facades and window frames.^[clarification needed] The most useful compounds of aluminium, at least on a weight basis, are the oxides and sulfates.^[citation needed]

Oxalate (**ethanedioate**) is the dianion with the formula $\text{C}_2\text{O}_4^{2-}$, also written $(\text{COO})_2^{2-}$. Either name is often used for derivatives, such as salts of oxalic acid, for example sodium oxalate $\text{Na}_2\text{C}_2\text{O}_4$, or dimethyl oxalate $((\text{CH}_3)_2\text{C}_2\text{O}_4)$. Oxalate also forms coordination compounds where it is sometimes abbreviated as **ox**.



The Equation of the Experiment: