

Expt. No.

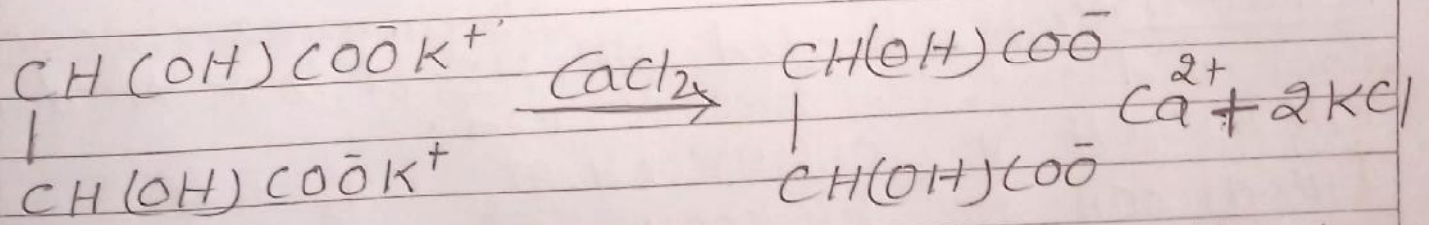
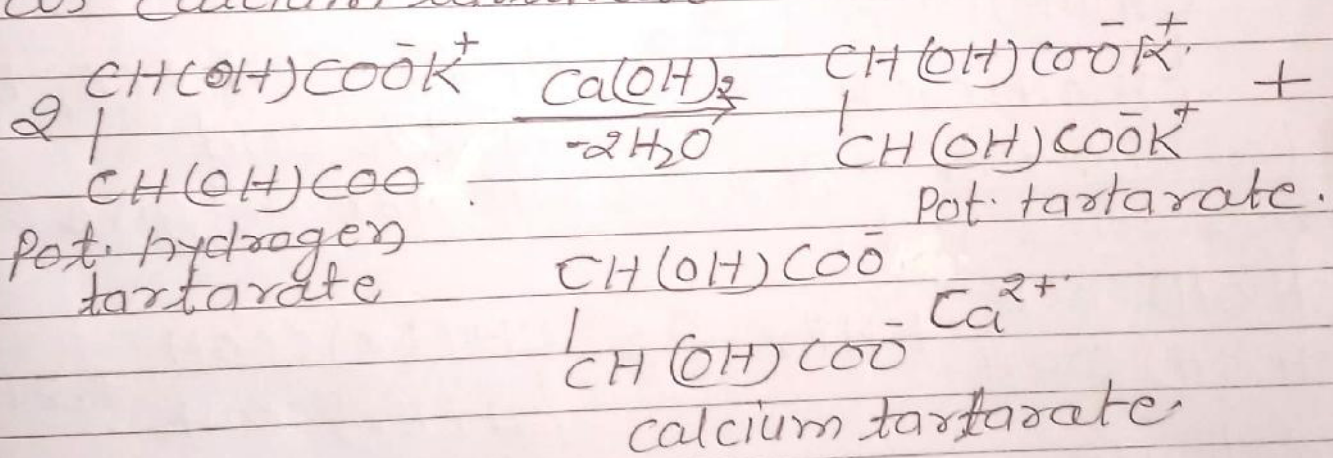
Tartaric acid :->

Tartaric acid occurs free and Potassium Potassium tartrate in grape Juice

Preparation :->

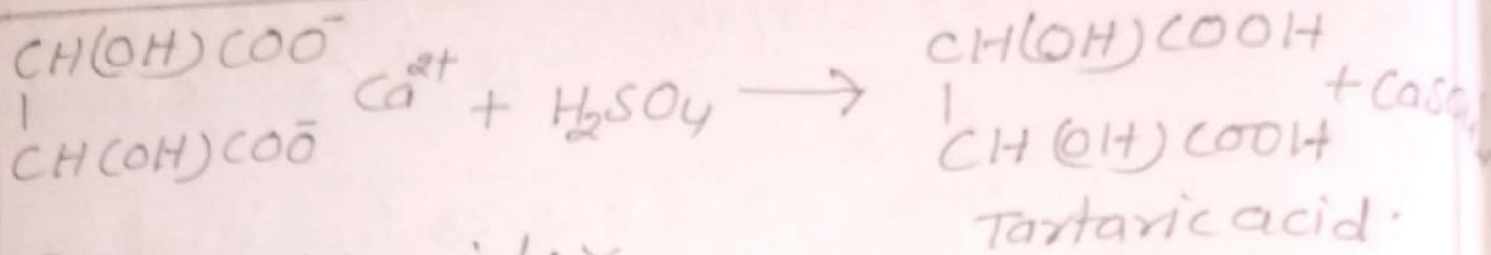
① From Grape Juice :->

Argol which is Potassium hydrogen tartrate, is formed as sludgy precipitate during the fermentation of grape Juice in wine-making. It is dissolved in boiling water and neutralised with milk of lime. Calcium tartrate is precipitated separated by filtration and the filtrate treated with calcium chloride when Potassium tartrate is also precipitated as calcium tartrate.



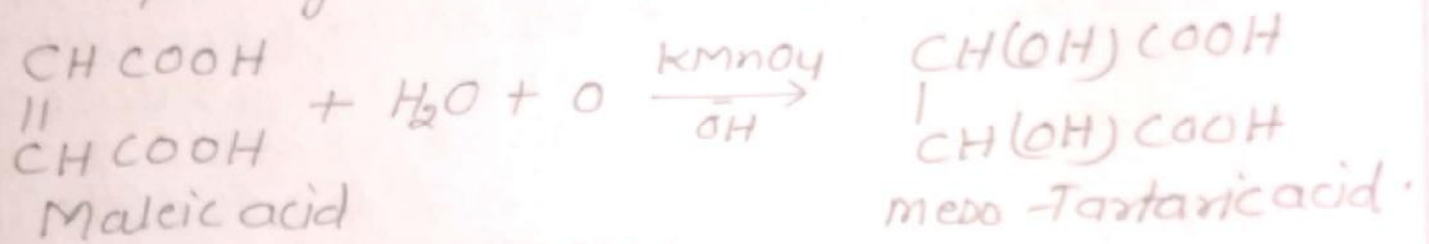
The calcium tartrate obtained in the two steps is treated with a calculated quantity of dilute H₂SO₄ to liberate tartaric acid. The calcium sulphate precipitate that is formed is removed by filtration, and the filtrate concentrated by evaporation to get the crystals of tartaric acid

Teacher's Signature



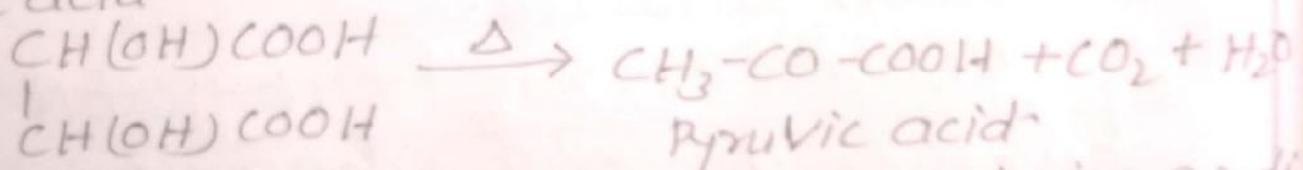
(2) From Maleic acid : →

Maleic acid produced industrially by oxidation of cyclohexane is treated with alkaline KMnO_4 to get meso-tartaric acid.

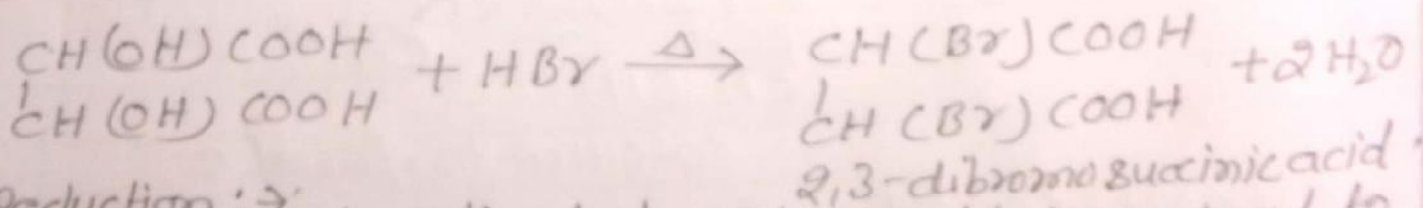


CHEMICAL PROPERTIES : →

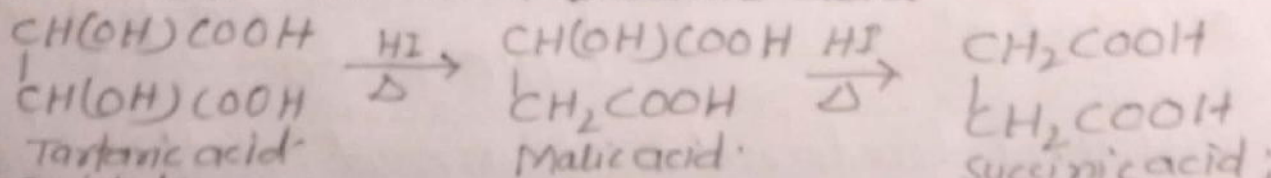
(1) Action of Heat : → when heated it is converted into Pyruvic acid.



(2) Action with HBr : → It reacts with HBr and give 2,3-dibromosuccinic acid



(3) Reduction : → when heated with HI, it is reduced to malic acid and then succinic acid.



(4) Oxidation : → on oxidation with HNO_3 , it is converted to tartaric acid and then oxalic acid.

