

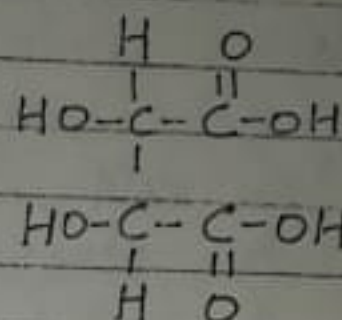
TARTARIC ACID

It is also known as d, l'-dihydroxy succinic
2,3-dihydroxy butane 1,4-dione. Dimeric acid

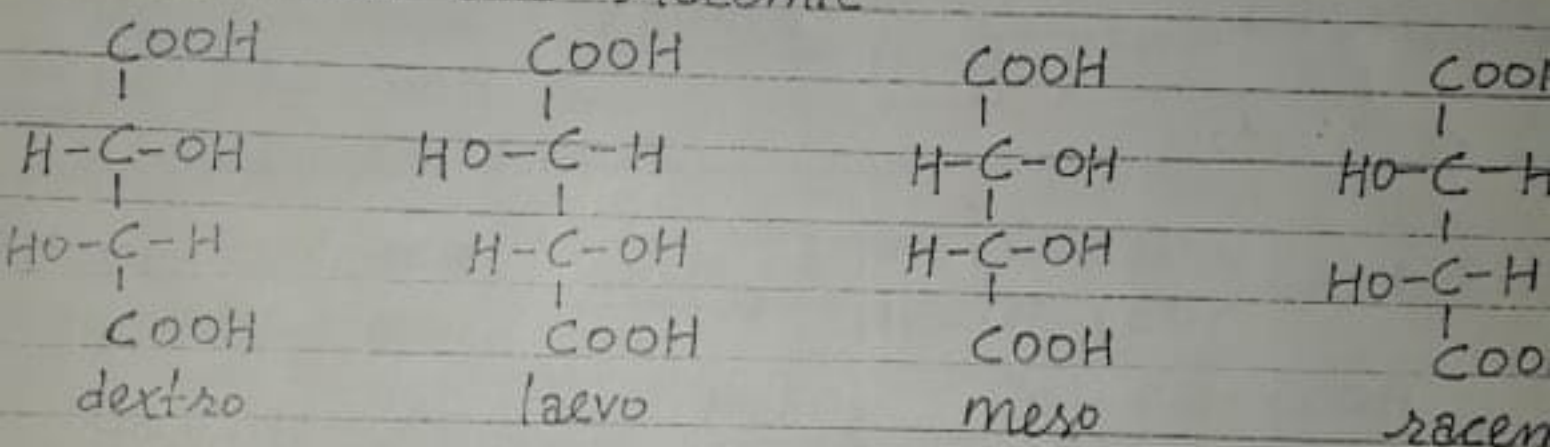
Molecular formula - $C_4H_6O_6$

Rational formula - $HO-CH-COOH$
 $HO-\overset{|}{CH}-COOH$

Structural formula -



Tartaric acid contains two identical asymmetry hence, it exist in four stereoisomeric form - D, L, meso and Racemic

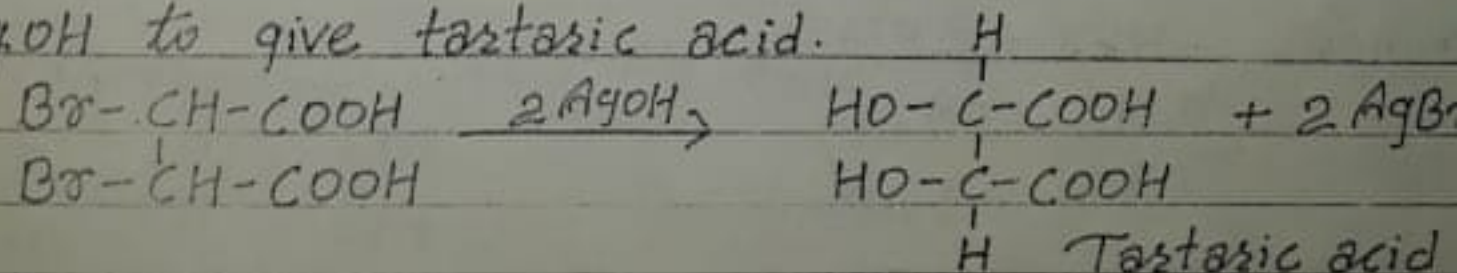


Tartaric acid is naturally occurring in dextro and present in free state. Such as grapes, pargol. During the formation of grapes juice bsc coloured mass is formed called argol. *

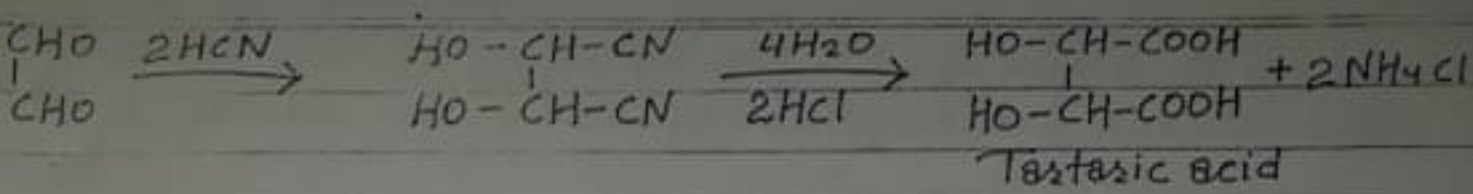
* Feorendo

Methods of Preparation :-

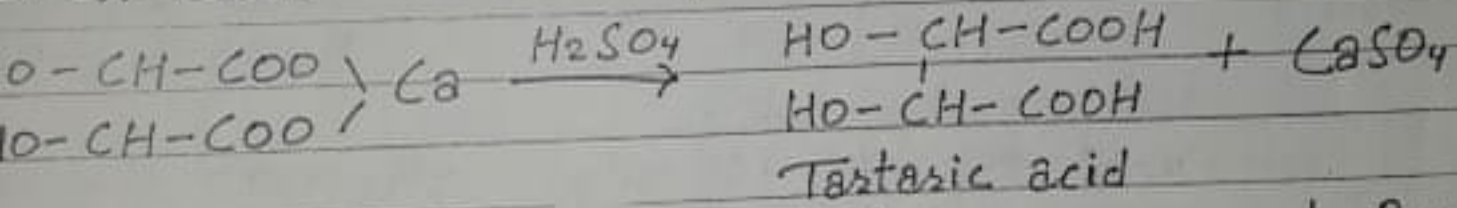
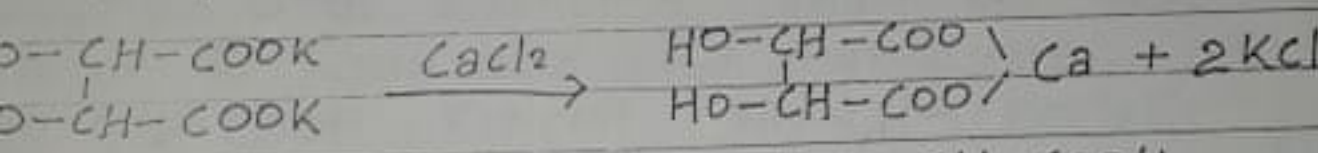
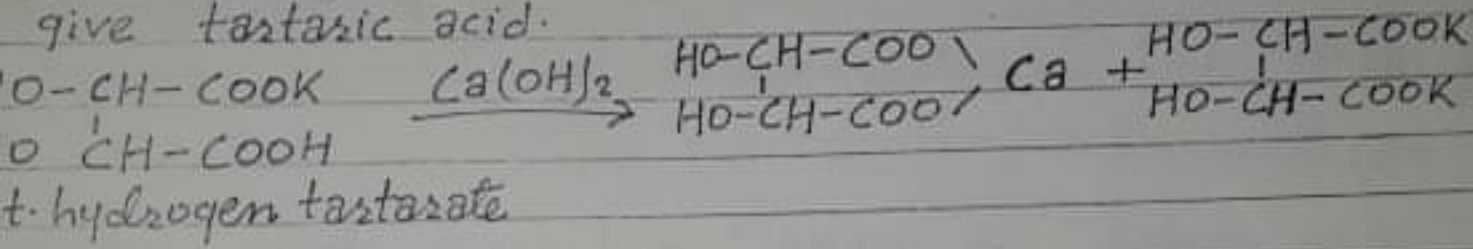
1. When d, d'-dibromo succinic acid reacts with $AgOH$ to give tartaric acid.



2. When glyoxal reacts with HCN to give glyoxal cyzine which is ^{further} hydrolysed with H_2O in presence of to give tartaric acid.



From Argol :- Crude argol is dissolved in boiling water & obtained pure white substance known as cream of tartar (Pot. hydrogen tartarate). It is dissolve in boiling water and neutralised with $\text{Ca}(\text{OH})_2$ then half of the original tartarate separate as insoluble calcium tartarate and other half reveals as Pot. tartarate. After filtration filtrate is treated with CaCl_2 solution to give Calcium tartarate. After that Ca . tartarate reacts with H_2SO_4 give tartaric acid.



When fumaric acid is oxidised in presence of Bayer's reagent to give tartaric acid.

