

## **Abstract**

Vitamin C (Ascorbic Acid) is widely used in skin care products, yet it is a challenging compound due to its physical and chemical instability. To monitor its chemical and color stability, samples were prepared with different concentrations of vitamin C and its variant and stored at temperatures (22-60 °) degrees for up to eight weeks. Both temperature and moisture content had a significant effect on chemical stability. Color changes occur faster than chemical degradation. Various strategies have been applied to improve the stability of Vitamin C such as the addition of antioxidants in the formulation (e.g. D -alpha-tocopherol acetate, Ferulic Acid, stable variants of vitamin C such as SAP( Sodium Ascorbyl phosphate ) , MAP (Magnesium Ascorbyl phosphate ) &(sodium metabisulfite). China clay is a well-known antioxidant and chelator to improve the stability of vitamin C.