In this study it was aimed to investigate the effects of preharvest application of ethephon on the primarily coloring, besides fruit quality and storage capability of Starking Delicious apple variety. Trials were conducted at Eğirdir Fruit Research Station and Süleyman Demirel University, Faculty of Agriculture, Horticulture Department postharvest physiology laboratory. Fruits were evaluated for some quality parameters at harvest date and 4 months later storage during two years in the study. At harvest date and after storage red colour index, fruit skin color, ethylene rate, respiration rate, firmness and soluble solids concentrations were determined in apples fruits. 100 ppm+100 ppm ethephon application when it was applied 5 weeks before harvest at intervals of 1 week increased significantly red color development However other quality attributes and storage capability were not affected significantly. In conclusion ethephon split application could be an effective method for improving colour.