

Effect of Solvent Fractionation on Bloom Stability

Daniel Kalnin, Geay, France

In this study, the behavior of soft condensed matrix especially fractionated cocoa butter matrix has been studied as a function of storage temperature (15°C and 23°C) and time (8 weeks). First of all, the cocoa butter has been fractionated by two solvents, namely, solvent 1 (acetone) and solvent 2 (90% acetone + 10% ethanol). The percentage of solvent ranged from 50% to 200% in volume. For each fractionation, two fractions have been obtained and have been named as stearic fraction which is the harder fraction obtained at room temperature and oleic fraction for the softer fraction obtained at 4°C. The samples have been prepared by two different processes; tempering and pressure process and in both processes, the samples were composed of a CB-matrix and a Liquid-Matrix. Then, they have been characterized by several instruments such as profilometry, LV SEM, EDS and DSC in order to study the migration phenomena in the matrix and the surface segregation.