Milk carbonization brings benefits to the dairy sector and it's known as an efficient method of conservation because of (CO₂) carbon dioxide’s acid character. As a non-expensive and easy obtunded gas, his used is incentivized and his waste, in carbonation, is the gas coming off the mixture. Within the limits, this easily reverted process doesn't compromise milk's proteins, maintaining his nutritive character. The goal is a thermodynamic study of CO₂ solubility in milk and the fats influences. Between the milk's fats, the triacylglycerol (TAG) is responsible for 97-98% of the total fat. So, milk was considered a binary mixture of water and TAG. Was admitted that gas fugacity coefficient and pointing tend to ideal. The partition coefficient is find as a function of activity coefficient, liquid fugacity and pressure. The γ is a function of the solubility's constant (δ), beside temperature. Using normal pressure, the process was taken in cold milk. The Shair-Prausnitz was used to estimate liquid fugacity. Assuming CO₂ is just partially sublevel in milk and the gas contribution in the δ omitted, the δ calculated makes the theoretical molar fraction of the gas in water, TAG and mixture possible, also the Henry's constant. The milk carbonated in two pH level was industrialized with TAG's tear obtained by Gerber process. By the data limitations and premade considerations, this valor is just an initial approximation but as in industry the process conditions as close to the experimental, the values are useful in this promisor process.