

**APPLICATION SIX SIGMA IN QUALITY CONTROL  
PRIMARY PACKAGING PROCESS OF "MARIMAS"  
FRUIT POWDER DRINK PRODUCT**

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**ABSTRACT**

*Powdered fruit drink is one of the consumer goods industry that have potential to develop. PT Ulam Tiba Halim is one of producers of the powdered fruit drink that have succeed in taking the opportunity by producing "MARIMAS" brand that is packaged in a sachet form. The quality and shelf life of the "MARIMAS" product determined by primary packaging process. Defects during primary packaging process will to have effects directly on the powder condition. Six Sigma method is one of the solution to improve process suitability and reduce defect that only 3,4 parts per million.*

*The main concern to solve in this research is which primary packaging machine have less performance in terms of sigma score, trends of DPMO (Defect Per Million Opportunity) and achievement of their sigma capability.*

*Result of baseline calculation of performace in the process, output and outcome level indicated that primary packaging process of "MARIMAS" product in single line packaging machine have less performance than multi line. In addition, trends of DPMO have tendency increase so its sigma capability achievement tend to downward.*

*Keywords : quality, primary packaging, sigma, DPMO, Six Sigma*