## Penerapan Metode Statistical Process Control (SPC) Dalam Pengendalian Kualitas Kecap Manis Cap "BINTANG" di Kecamatan Cluring Kabupaten Banyuwangi)

(Application of Statistical Process Control (SPC) in the quality control of sweet soy sauce Cap "BINTANG" in the District Cluring Banyuwangi Regency)

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## **ABSTRACT**

Soy sauce is one of the foods resulting from soy fermentation which serves as a complementary food and flavoring dishes that are useful to improve the taste of dishes. One of the sweet soy sauce industry is UD Bintang Jaya located in Sraten Village, Cluring District, Banyuwangi Regency. In the process of sweet soy sauce production at UD Bintang Jaya, quality control is carried out with the aim of maintaining product quality. This study aims to analyze the quality control or quality of sweet soy sauce, the implementation of control charts and process capabilities in the quality control of sweet soy sauce at UD Bintang Jaya, as well as to determine several factors that can affect the quality of the product. The method in this study is the Statistical Process Control (SPC) method with statistical instruments including pareto diagrams, causal diagrams, control charts, process capabilities. According to the results of the study, the results of quality control at UD Bintang Jaya showed the highest disability based on the Pareto diagram, namely the variable weight of sweet soy sauce that does not match the standard with a percentage of 43%. Some factors that affect product quality are human factors, machine factors, material factors, and method factors. The results of the implementation of the NP control chart showed that the quality control of the variable cleanliness of sweet soy sauce, packaging leakage, and the weight of sweet soy sauce contained in the control limit area. The process capability in UD Bintang Jaya on the variable weight of sweet soy sauce is 0.9813, the variable leakage of packaging is 0.9823, and the variable cleanliness of sweet soy sauce is 0.9934. These results can be a reference for the company to be able to improve and maintain product quality.

Keywords: Quality Control, Statistical Process Control (SPC), Sweet Soy Sauce