

## ABSTRACT

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**ANALYSIS OF SUPPLY CONTROL OF ACUSOL 301 RAW MATERIALS  
IN PEACE BRAND CARBOL PRODUCTION AT CV. MULIA MAS  
CEMERLANG, BEKASI DISTRICT, WEST JAVA PROVINCE**

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**Keywords:** Raw Material Inventory, CV. Mulia Mas Cemerlang, *Economic Order Quantity*

**( xiii + 42 + Appendices)**

CV. Mulia Mas Cemerlang is a manufacturing company that produces Peace brand carbolic products. Carbolic acid is a household cleaning fluid that functions to remove odors and kill germs and microorganisms that stick to the surface of an object. Peace brand carbolic products with the main raw material, namely Acusol 301. Acusol 301 is included in the main raw materials ordered by domestic suppliers. The problems that occur in CV. Mulia Mas Cemerlang is that the company often experiences a shortage of Acusol 301 raw material stock which results in delays in the production process due to a shortage of stock and the company wants to reduce the total costs incurred in controlling Acusol 301 raw material inventory. This research aims to solve the problems that exist in the company, namely determining the quantity Acusol 301 raw materials purchased by the company for every purchase, the company must know when to order raw materials, what quantity of raw materials is always in safety stock (Safety Stock) to avoid obstacles in the production process and reduce total expenditure in controlling material inventory standard Acusol 301. This problem can be solved using the Economic Order Quantity method because this EOQ method tries to achieve optimum inventory levels and can reduce the total cost of inventory which can benefit the company. Based on the results of research on the quantity of orders using the Economic Order Quantity inventory model with a total of 685,950 kg with an order frequency of 5 times a year with 69 days of order recycling, safety stock or safety stock of 182,671 kg, and a reorder point or reorder point of 222.723 kgs. The total cost of raw material inventory for Acusol 301 based on the results of calculations using the Economic Order Quantity method is Rp. 323,952,775.454 and the total cost according to the company is Rp. 327,355,020 from these two different calculation results results in a difference of Rp. 3,402,244.546 during the period September 2021 – August 2022 so the calculation using the Economic Order Quantity indicates it is more economical than company policy.

## REFERENCES (2005 - 2022)