TOTAL PLATE COUNT (TPC) TEST ON ORGANIC MASKS SOLD ONLINE

Madani, Wattiheluw*

D3 Study Program of Pharmaceutical and Food Analysis, Ministry of Health Polytechnic of Malang

**Email: sabillamadani@gmail.com*

ABSTRACT

***Background**: Skin care, especially organic face masks, is increasingly popular in society because it is considered safe and provides benefits for skin health. However, the rampant circulation of organic masks without BPOM permits on e-commerce platforms raises concerns regarding product safety and quality, especially the risk of microbial contamination that can cause irritation, allergies, and skin infections. The risk of microbial contamination can be measured from various parameters, one of which is TPC. **Objective**: This study aims to determine the Total Plate Count value of organic masks sold online and then interpret the results with the standard for mask preparations, namely SNI 16-6070-1999. **Research Methods**: Testing was carried out to measure the TPC parameter using the pour cup method, with the stages of sterilization of tools and media, sample dilution, inoculation, incubation, and bacterial colonies at a temperature of 35–37°C for 24–48 hours. **Research results**: Sample A is 1.6 x 106 cfu/gram. Samples B and C are <1000 cfu/gram. In sample D is 5.1 x 105 cfu/gram. In sample E is 1.1 x 104 cfu/gram. **Conclusion**: Samples B, C, E still meet the requirements, while the results of samples A and D do not meet the requirements according to SNI 16-6070-1999 concerning mask preparations, namely the Total Plate Number parameter with a maximum limit of 105 cfu/gram.*

***Kata kunci:** Organic Masks, Total Plate Count.*