

Roasted and Ground Coffee in Nitrogen Gas Flushing Packages - II

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SUMMARY

In this paper it was evaluated the effect of the filling conditions in vertical flow pack equipment (with and without nitrogen injection), on the shelf-life of roasted and ground coffee. For this, one type of packaging material consisted of metallized polyester (PETmet) and linear low density polyethylene (LLDPE), (OTR of 0,57 cm³(STP)/m²/day at 25°C, 1 atm in dry conditions) were evaluated. After formation, filling and sealing of the packages, they were stored at 25±2°C/65±3%RH. A decrease of the residual oxygen concentration of the headspace was observed during the storage, probably caused by consumption of that gas in oxidation reactions. It caused sensorial changes in the product and limited its shelf-life. The results indicated that the shelf-life to the coffee was at least 6 months at 25°C/65%RH in nitrogen gas flushing packages (2 to 3% of residual oxygen in about 680 mL at 25°C and 0,92 atm), while in the system without nitrogen injection the shelf-life was 3 months.