

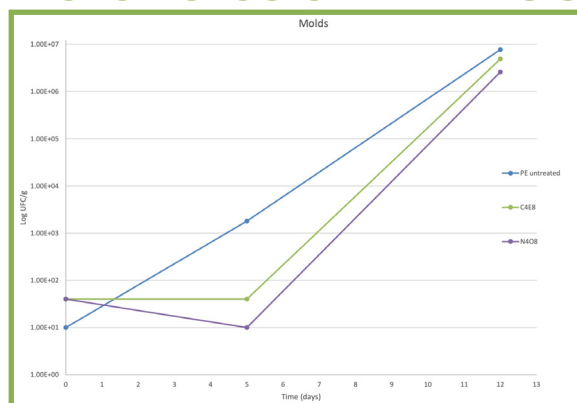
# BREAD

## MOISTURE ANALYSIS

Time (days)	PE	Moisture	
		C4E8	N4O8
0	38.7	40	43
5	39.4	41	40.6
12	42.2	40.9	39.3

After 12 days, the bread in the untreated PE bags was more humid than the bread in the PE bags coated with either filler. The higher moisture level in the untreated PE bags caused mold to multiply on the bread.

## MICROBIOLOGICAL ANALYSIS



### TEST CONDITIONS

12 days at room humidity and temperature



### FILLERS

N4O8 and C4E8  
Application: Coating



### TYPE OF PACKAGING

PE bags coated with N4O8 or C4E8 fillers

Sample referenced:  
Untreated PE bags

## WITH CRONOGARD



## WITHOUT CRONOGARD

# BREAD

After just 5 days, the amount of mold on the bread in the untreated PE bags was far more than the bread in the PE bags coated with C4E8 or N408 fillers. This difference was even clearer after 12 days. These results show that the fillers slowed down the spread of mold on bread.

## RESULTS

### Organoleptic analysis

*Shelf-life Study:* fresh white bread in *untreated PE bags* for 12 days at room temperature.

*Result:* 5 out of 6 parts had some mold; 15% was covered in mold (on average). The bread was soft, only slightly hardened.

*Shelf-life Study:* fresh white bread in *PE bags treated with N408* for 12 days at room temperature.

*Result:* 1 out of 6 parts had 1 mold. The bread was soft, only slightly hardened.

*Shelf-life Study:* fresh white bread in *PE bags treated with C4E8* for 12 days at room temperature.

*Result:* All parts were OK. The bread was soft, only slightly hardened.



### TEST CONDITIONS

12 days at room  
humidity and temperature



### FILLERS

N408 and C4E8  
Application: Coating



### TYPE OF PACKAGING

PE bags coated with  
N408 or C4E8 fillers

Sample referenced:  
Untreated PE bags