



***SENSORS COMPATIBILITY***  
***between JohnsonDiversey products and Food&Beverage processing series***

**Introduction**

Sensors specific to food and beverage processing industries have been sampled to be tested from the point of view of the compatibility with JohnsonDiversey's detergents and disinfectants. Sensors have been identified as follows:

- PFM1
- PFK1
- FF\*\*

The picture shows examples of sensors.



**Test protocol and procedure**

Procedure	full immersion of the sensors in the various diluted detergents and disinfectants	
Time of contact	25 days	
Temperature	cold and hot temperature according to the sequence:	
	<ul style="list-style-type: none"> <li>▣ 20 hours at +5°C</li> <li>▣ 4 hours at room temperature (+20°C)</li> <li>▣ 20 hours at +40°C</li> <li>▣ 4 hours at room temperature (+20°C)</li> </ul>	
Products	OXOFOAM	alkaline moderately chlorinated
	HYPOFOAM	alkaline strongly chlorinated
	UNIFOAM	strongly alkaline
	ENDURO CID	gel descaling acid
	ACIFOAM	foam descaling acid
	DELLADET	neutral detergent disinfectant
	VIRAGRI PLUS	neutral disinfectant with glutaraldehyde
Tested concentration	4%	

Equivalences

the chemical category of some products is comparable with other ones (same components at different concentration). Their behaviour in contact with sensors is similar and the compatibility is equivalent. Hence, the use of equivalent products gives the same compatibility. The equivalent products are listed below:

HYPOFOAM <> ENDURO PLUS  
UNIFOAM <> ENDURO FORCE  
ENDURO CID <> ENDURO ECO <> ACIFOAM  
VIRAGRI PLUS <> TEGODOR <> DIVOSAN 2000  
DELLADET <> SEPTINEIGE PLUS

### **Result and Certification**

The microscopy analysis does not reveal chemical and physical modification to the sensors in their different components such as to be ascribed to a chemical attack of the tested products.

Products containing chlorine show a light fading of the orange colour on the plastic material. By considering the strong oxidizing power (decolouring) typical of chlorine, the behaviour of the chlorinated detergents is quite normal and has no influence on the efficiency of the sensors.

In presence of sensors such as those sampled, the JohnsonDiversey's tested products can be used for cleaning and disinfecting in food&beverage processing industries when applied according to the recommended concentration and temperature.

**Dr. Mario Stanga**

*Technical Centre Manager  
JohnsonDiversey*

Bagnolo Cremasco  
Gennaio 07, 2008