



## Technical Report

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# Pall Kleenpak™ KA2IN4 Disposable Filter Capsule compatibility with IMS-III sanitizer

### Introduction

IMS-III Sanitizer (Nu-Calgon, MO, USA) is recommended by Follett LLC (PA, USA) for sanitization of the Symphony Plus™ Water and Ice Dispenser. IMS-III sanitizer is an ammonium chloride based solution, which has been developed for sanitization of ice machines and food dispensing equipment.

The recommended dilution rate of the IMS-III sanitizer is 1.6 oz (47.3 mL) per gallon (3.8 L) of water, which results in a 200 ppm quaternary ammonia concentration and has an intended surface contact time of 5 minutes.

This test report describes compatibility of the Kleenpak KA2IN4 Disposable Filter Capsule with IMS-III sanitizer.

### Material and methods

The KA2IN4 filter capsule was immersed in an undiluted solution of the IMS-III sanitizer for a total time of 21 hours at room temperature.

After the test period, the filter capsule was subjected to a non-destructive Forward Flow Integrity Test<sup>1</sup> which has been correlated to bacterial retention integrity and therefore to confirm chemical compatibility with the filter membrane and housing.

### Results

The filter capsule passed the Forward Flow Integrity Test following exposure (submersion) to undiluted IMS-III solution for a period of 21 hours. No anomalies were observed on visual examination of the filter capsule (Table 1).

**Table 1.**  
**Forward Flow Integrity Test result following exposure to undiluted IMS-III solution for 21 hours.**

Filter Serial Number	Integrity Test	Remarks
I213480013	PASS	None

### Discussion

This evaluation demonstrated that the Kleenpak KA2IN4 Disposal Filter Capsule was compatible with exposure to undiluted IMS-III sanitizer for up to 21 hours. Therefore, the KA2IN4 filter can be kept in place during sanitization of the Symphony Plus at the recommended dilution rate of 1.6 oz/gal. The KA2IN4 has been challenged with a sanitizing solution 80 times more concentrated than recommended and for a time period (21 hours) corresponding to more than 250 sanitisation cycles (based on 5 minutes exposure time).

The results from the Forward Flow Integrity Test have shown that the Kleenpak KA2IN4 disposal filter capsule retains its structure and integrity even under these aggressive chemical contact conditions.

### Conclusions

The Kleenpak KA2IN4 Disposal Filter Capsule is compatible with the protocol recommend by Follett LLC for sanitization of the Symphony Plus Water and Ice Dispenser.

### References

1. Pall SLS Laboratory Method, GMED LSM 081 - Forward Flow Integrity Testing of Medical Water Filters



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