



# Micrylium

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## **BioSURF And BioTEXT Evaporation Studies**

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### **Method:**

A twofold study was performed to measure the evaporation and subsequent loss of efficacy of BioSURF.

Three Le CLOTH canisters each were loaded with one roll of Le CLOTH disposable fibre napkins. Each was marked with colour-coding cap using green for. Further identification was made by marking the body and the cap of the canister each with indelible ink S1, S2 and S3 representing the three BioSURF canisters. The dry canisters with the cloth inserted were weighed and the weight was recorded. Each canister was charged using a 500 ml. pouch of. The canisters were weighed again and the weight was recorded.

Each canister was then opened at the cap seal and individual sheets of cloth were removed and weighed. The weight was recorded. For each canister a total of ten sheets were removed one at a time, closing the cap between removals. The scale (Sartorius EB35ED, accuracy 1 gm) was zeroed between weighing each cloth. At the end of the first day, the canisters were again weighed; the weight was recorded.

For the following 5 days (with the exception of day 3) each morning the canisters were weighed and ten sheets were removed as in day one. At the end of the day, the canisters were again weighed.

### **Results:**

	<u>Test Results</u>
	BioSURF
Loss from day to day by weight %	0.00%
7 day loss from cloth removal %	0.57%
GC % ethanol	68.22%

Findings were that from the day's end to the following morning, no product evaporation occurred as the weights from day to day were identical.

When comparing day's starting to the day's ending, the measured day's end was less than the predicted when weighing the individual cloths. However, the 0.57% loss with over 5 days is made up in large part to product that is splashed on removal of the cloths from the container.

The second part of the test, with gas chromatography, was of the remaining fluid within the canisters. The only volatile component in the solution is ethanol. Verification was performed with a GC using as a comparator the manufacturing standard for both products for their final release for sale. Each canister was tested twice as per S.O.P. The G.C. values were averaged and the mean was used for the calculations. Each sample and each canister was within specification for product that would be released for sale.

**Conclusion:** The evaporation of both BioSURF in the Canister/Cloth form during simulated use over one working week is insignificant.

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