

# HTS Autosampler Z

## The Ultimate Weapon against Zero Carryover



### What is Carryover?

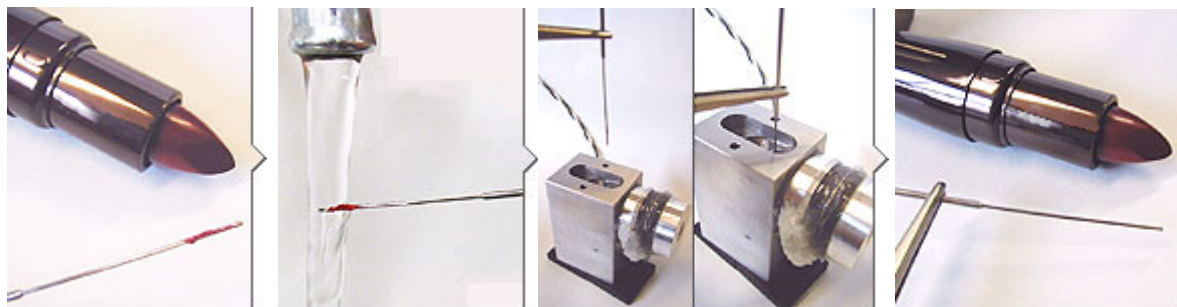
Carryover, which behaves as if it exists in the current analysis, greatly damages not only the trueness and precision of analysis but also the laboratory efficiency because follow-up investigations and measures are necessary.

### Causes of Carryover

There are various causes of carryover, such as the adsorption of an insoluble sample during gradient analysis and elution from a column. However, adsorption to the autosampler and insufficient rinsing are the main causes.

### Carryover Measures 1

A built-in ultrasonic rinsing mechanism was developed. Powerful ultrasonic energy thoroughly removes any sample deposited at the needle surface during sampling. This mechanism requires the simple setting of ultrasonic rinsing ON (5, 10, or 30 seconds) and OFF and only water is used.



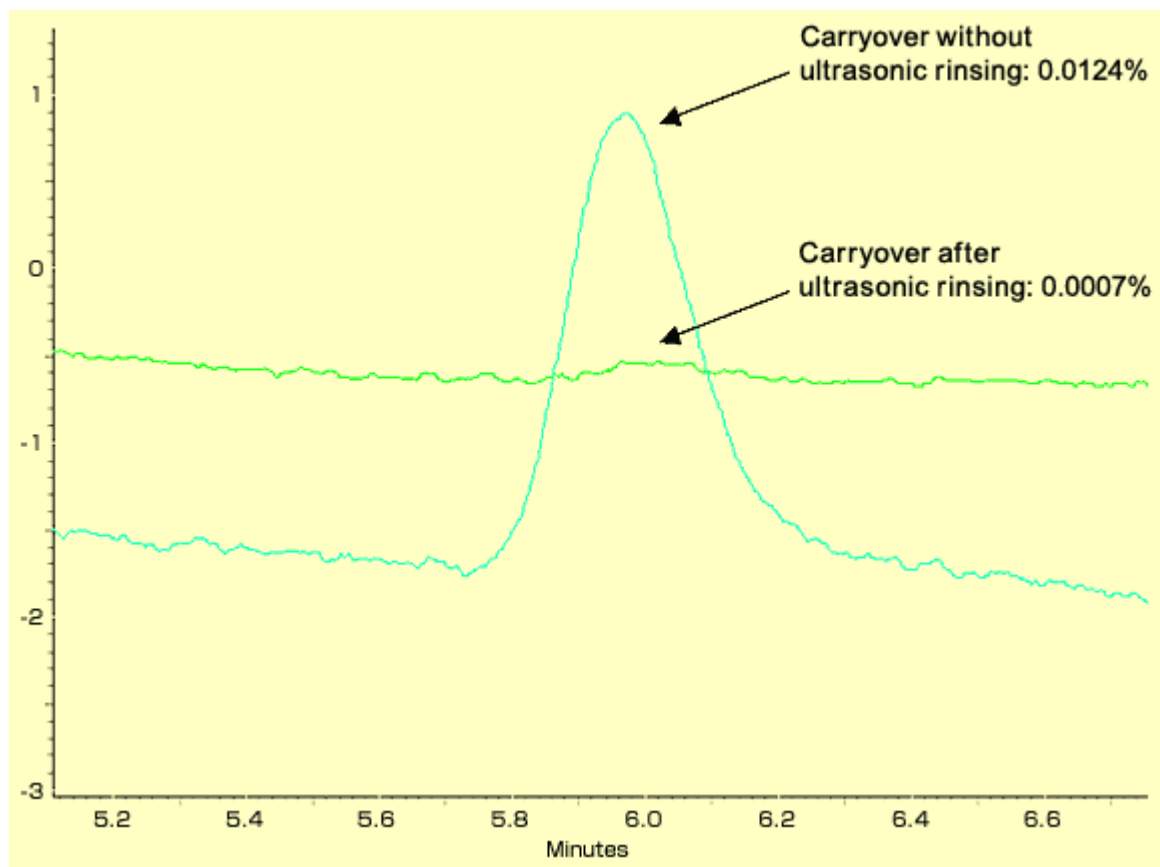
The needle is stained with lipstick of high fat-solubility which is difficult to remove.

The lipstick cannot be removed with flowing water.

The needle is lowered into the ultrasonic rinsing port.

After ultrasonic rinsing, the lipstick cannot be seen on the needle.

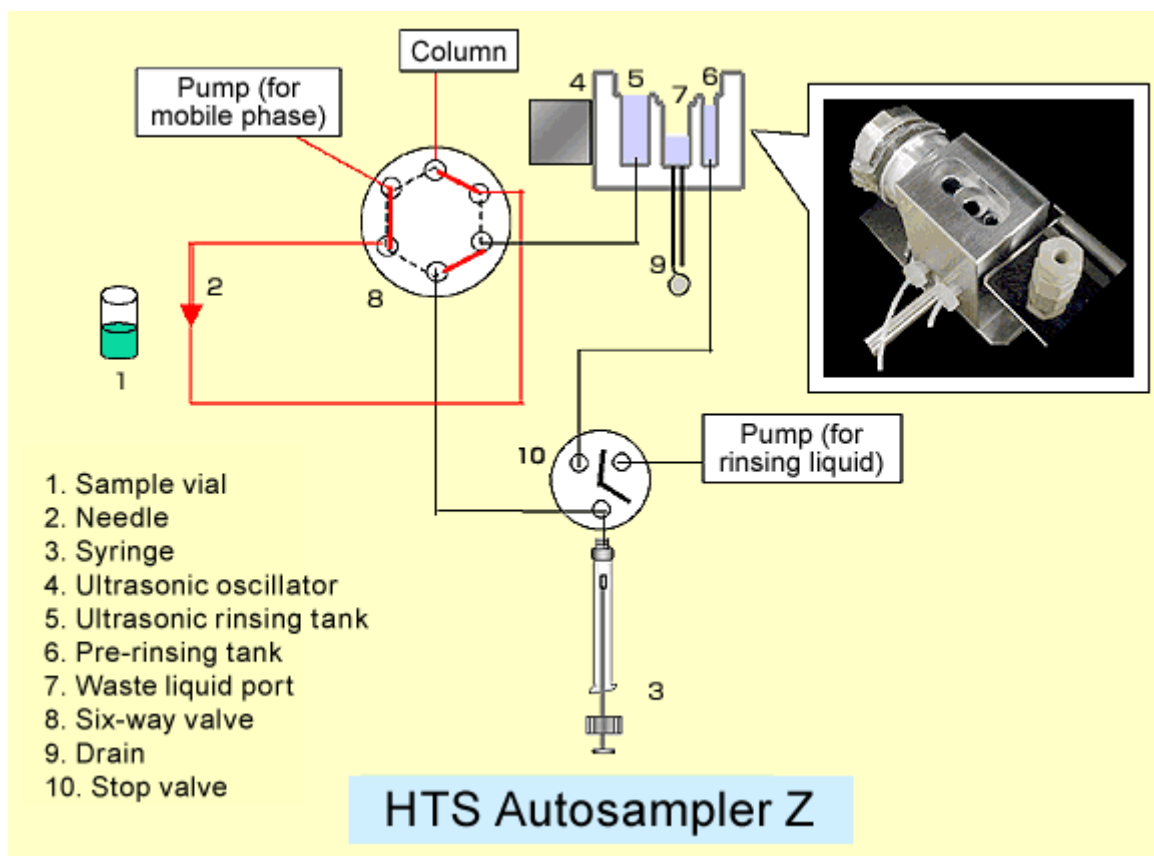
### Removal of chlorhexidine carryover



### Carryover Measures 2

The autosampler adopts the direct injection system having a simple structure and operation, hardly adsorbing samples.

During analysis, a needle is inserted into the flow channel to flush the inside with the mobile phase, which minimizes carryover. The injection time for full rinsing is reduced to 30 seconds.



## Wide Lineup of Sample Vials

### Vial Holder

- (1) 96 deep-well plate
- (2) Osaka Soda vial (\*)
- (3) 96-well microplate

\* Osaka Soda vials are available in 250  $\mu\text{L}$  and 2 mL types.

### Specifications

Product No.	3133
Product Name	HTS Autosampler Z
System	Direct injection system
Sample Injection Volume	0.1 to 80 $\mu\text{L}$ by 0.1 $\mu\text{L}$ increments
Injection Precision	RSD less than 1% at 0.1 $\mu\text{L}$ injection
Number of Samples Processed	Microplate x 6, deep-well plate x 6, 250 $\mu\text{L}$ vial x 576, 2 mL vial x 144
Sample Cooling	4 to 20°C (variable setting)
Power	AC 80 to 240 V, 50/60 Hz
Dimensions	450(W) x 458(H) x 480(D) mm
Weight	About 36 kg

Rinsing Capability

Ultrasonic rinsing