# THE MICROMIST NEBULIZER

## When Conservation is Important

The Glass Expansion MicroMist low-flow nebulizer is ideal for ICP-MS and ICP-AES applications where sample needs to be conserved. The MicroMist uses the same VitriCone™ technology as the industry-standard Conikal and SeaSpray nebulizers, resulting in the most rugged and reliable low-flow nebulizer available.

### A sample uptake rate for every low-flow application

The MicroMist line includes nebulizers with natural sample uptake rates of 50, 100, 200, 400 and 600 ul/min. With strong and consistent self-aspiration, these nebulizers can be used either with or without external pumping.

### Recommended Applications

- Samples with limited volume such as difficult to digest samples or certain biological
- specimens.
- Expensive waste disposal such as that from radioactive or biological samples.
- Any ICP-MS applications where oxide interferences exist.
- Volatile organic solvents that would otherwise cause an excessive load on the plasma.

### Enhanced Efficiency

Although these nebulizers have lower uptake rates, their transport efficiency is higher than for standard flow nebulizers. The graph illustrates the relationship between uptake rate and nebulizer efficiency (the percentage of the sample that reaches the plasma as opposed to going down the drain).

The 50ul/min nebulizer has 50% efficiency and therefore injects 25ul/min into the plasma. On the other hand, the standard 2ml/min nebulizer has 2% efficiency, resulting in 40ul/min of sample injected into the plasma. This means that the MicroMist nebulizer can reduce sample consumption by a factor of 40 and yet the sensitivity is reduced by less than a factor of two.

**Continued overleaf**

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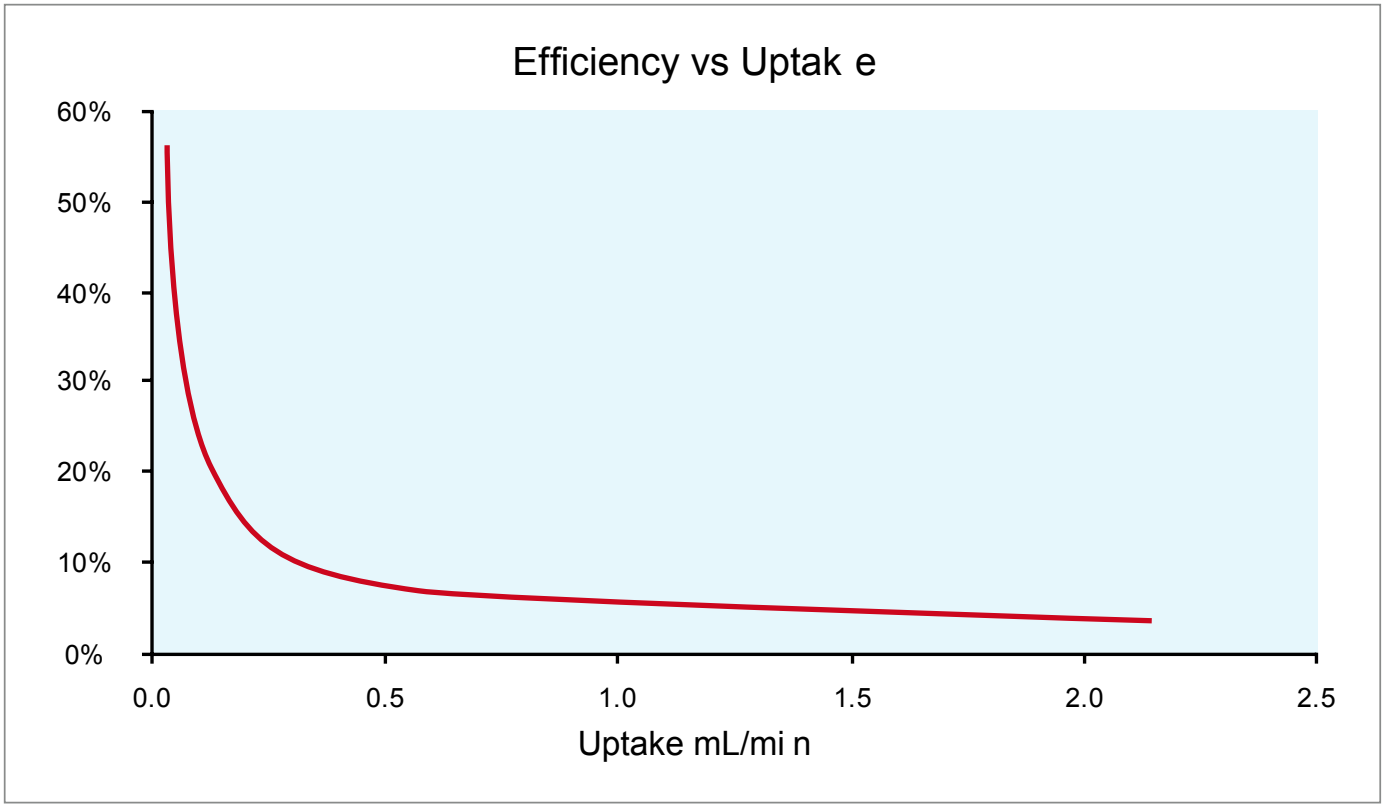
## Reduced Interferences

The smaller droplet size of the MicroMist nebulizer has additional analytical advantages, including reduced matrix interferences and a more robust plasma.

## Best if used with a low-volume spray chamber

Because of the low uptake rates, it is best to use MicroMist nebulizers in conjunction with a low volume spray chamber such as the Cinnabar or Twinnabar designs.

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