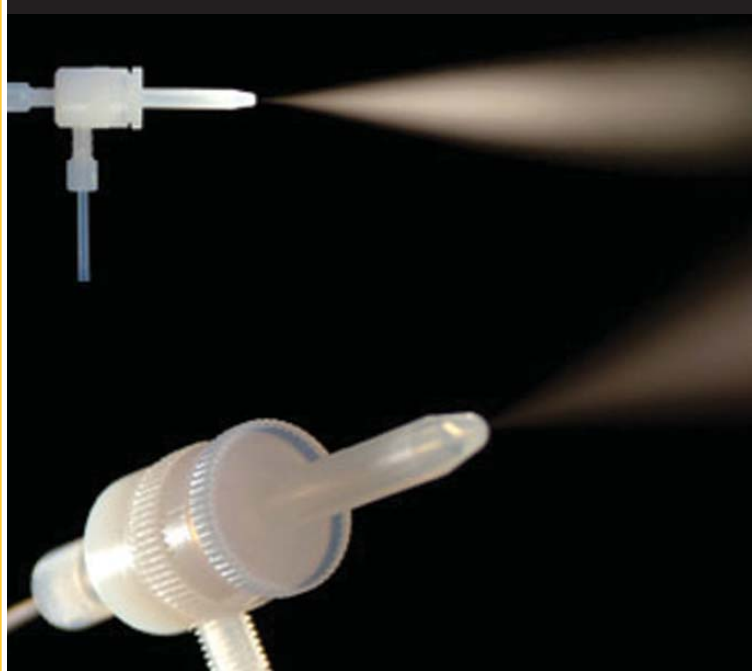


# ASPIRE™

## Low-Flow PFA Adjustable Nebulizer

The Aspire™ PFA Adjustable Nebulizer is designed for the introduction of small volume samples (< 1 mL) to an ICP-AES or ICP-MS instrument for trace element analysis. The nebulizer consists of a PFA body and a Teflon® PTFE capillary for maximum chemical resistance and low trace element blanks.



NEBULIZERS

### EFFICIENT

Featuring a unique gas orifice design, the Aspire™ series nebulizers achieve high sample transport efficiency for low volume samples (1 mL or less) with ICP-AES or ICP-MS. The nebulizers are available in flow rates of 50, 100, 200 or 400 µL/min and operate at normal argon gas flows and pressures.

### SENSITIVE

Analyte sensitivity can be up to 2x that of conventional, high flow (1 to 2 mL/min) pneumatic nebulizers used with ICP-AES or ICP-MS. A make-up gas (e.g. argon or O<sub>2</sub>) can be added to the nebulizer spray chamber for optimum signal or special applications such as the introduction of organic solvents.

### STABLE

Aspire™ nebulizers are ideal for self-aspiration due to the high suction produced by the unique orifice design. The Aspire™ may also be pumped depending upon sample type and application. Analyte signal stability by self-aspiration is near 1% RSD or less.

### INERT

The Aspire™ is constructed of virgin fluoropolymer components: a PFA (perfluoroalkoxy) adjustable outer tip and a PTFE (polytetrafluoroethylene) capillary for maximum chemical resistance to all acids (including HF), alkalis and organic solvents. These high purity components also allow for ultra-trace element analysis by ICP-MS techniques.

### ECONOMICAL

The Aspire™ nebulizer features a unique adjustable outer PFA nebulizer tip and a fully replaceable capillary assembly. If the capillary becomes irreversibly clogged or damaged, the user does not have to acquire a complete new nebulizer, only the capillary. The adjustable tip then allows the nebulizer to be reset for the best aerosol and analytical performance.

The nebulizer is built to standard 6 mm dimensions for easy connection to a standard cyclonic spray chamber. The nebulizer kit includes a selection of common fittings to interface with the host ICP-AES or ICP-MS instrument.

### RELIABLE

The gas orifice of the Aspire™ nebulizer is specifically designed to minimize “vapor lock” or the stoppage of liquid flow by air pockets in the uptake capillary. (This event can occur when switching between samples while using a nebulizer in the self-aspiration mode.) The Aspire™ nebulizers can be used with the CETAC Aridus II™ Desolvating Nebulizer System and the ASX-112FR Autosamplers.

### Technical Specifications

**Sample Uptake Rate:** 50 µL/min, 100 µL/min, 200 µL/min or 400 µL/min

**Nebulizer Gas Flow:** 0.7 to 1.0 L/min Ar

**Nebulizer End (outer diam):** 6 mm

**Nebulizer Overall Length:** 60 mm

**Uptake Line Length:** 700 mm

**Warranty:** 12 month limited

