

Nebulizer Comparison Table

Nebulizer	Material	Nom. Uptake Rate	Capillary Tip ID	Uptake Line	Dead volume	Uptake Line ID	Max TDS	Max. Particle Diameter	Low Metal Background?	Rugged?	Chemical Resistance	Price	Notes
		uL/min	mm			mm	%	uM					
Savillex C-Flow 700	PFA	700	0.31	Integrated	Zero (no connector)	0.31	25	80	Excellent	Extremely	Excellent	\$\$\$	Excellent sensitivity combined with excellent tolerance to high TDS and particulates. Zero dead vol for fastest wash in/out. Resistant to all chemicals, robust and easy to maintain. Wide operating sample flow range: 200-1200uL/min.
GE Seaspray	Borosilicate	2000	0.4	Separate, push fit	Low	0.75	20	75	Trace boron bkg	May break if dropped. Cant be sonicated	No HF	\$\$\$	Excellent tolerance to high TDS and particulates. Weak points typical of conventional glass concentrics.
GE Micromist	Borosilicate	400	0.15	Separate, push fit	Low	0.5	15	no spec	Trace boron bkg	May break if dropped. Cant be sonicated	No HF	\$\$	Excellent sensitivity but less tolerance to high TDS and particulates. Weak points typical of conventional glass concentrics. Compatible with lower flow rates
GE Conikal	Borosilicate	1000	0.4	Separate, push fit	Low	0.75	5	75	Trace boron bkg	May break if dropped. Cant be sonicated	No HF	\$\$	Good sensitivity but less tolerance to high TDS and particulates. Weak points typical of conventional glass concentrics.
ESI Microflow ST	PFA	700	0.203	Separate, screw connector	Virtually zero	0.8	no spec	no spec	Excellent	Yes - though cant be backflushed	Excellent	\$\$\$\$	Excellent sensitivity but less tolerance to high TDS and particulates. Resistant to all chemicals. Difficult to unblock. Wide operating sample flow range: 200-1200uL/min.
Burgener Mira Mist PEEK	PEEK body PTFE capillary	Doesn't free aspirate	0.425	Separate, screw connector	Virtually zero	variable	no spec	no spec	Excellent	No - touching the tip will destroy the neb	No H2SO4, conc acids or certain organics	\$\$\$\$	Excellent tolerance to high TDS and particulates. Weak points: easy to damage tip by touching, chemical resistance is limited, price. Short lifetime - as little as 6 months is stated.
Meinhard Type A (High Sensitivity)	Quartz	1000	0.23-0.26	Separate, push fit	Higher	variable	no spec	no spec	Excellent	Will break if dropped. Cant be sonicated	No HF	\$	Low price. High dead volume means longer wash in/out. Other weak points typical of conventional quartz concentrics.
Meinhard Type C (High Solids)	Quartz	1000	0.28-0.3	Separate, push fit	Higher	variable	no spec	no spec	Excellent	Will break if dropped. Cant be sonicated	No HF	\$\$	Low price. High dead volume means longer wash in/out. Other weak points typical of conventional quartz concentrics.