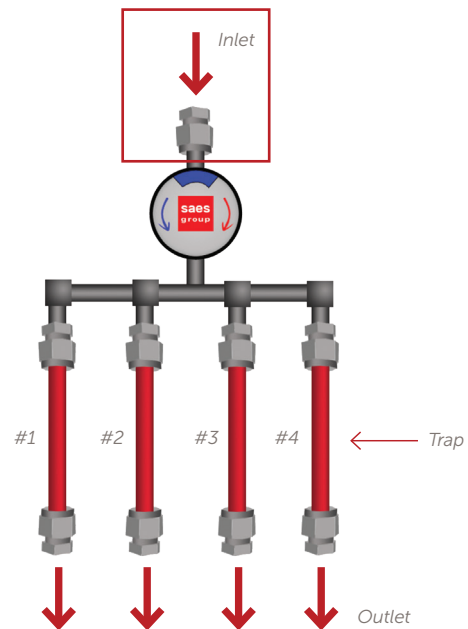


# GateKeeper® GSS Microcontamination Inspection Service

*AMC analysis to parts-per-trillion levels  
in a simple and easy-to-use package*

This analytical service has been developed to provide end-users of lithography, inspection, and metrology equipment with a simple and reliable tool for parts-per-trillion (pptV) molecular contaminant certification.

The GateKeeper Gas Sampling System (GSS) is fully qualified by the major lithography and metrology tool manufacturers. Tool owners can utilize GateKeeper GSS for warranty certification of all facility gases, cleanroom air and compressed dry air.



Trap #1 Control Trap  
Trap #2 Acids  
Trap #3 Bases  
Trap #4 Hydrocarbons/Refractory Compounds

## APPLICATIONS

- Purge gas certification for optics
- Lithography, inspection, metrology tool certification
- Pre/post purifier assessment
- Gas piping and component outgassing survey
- Cleanroom analysis

## FEATURES

- Part-per-trillion volume (pptV) sensitivity
- Single sample connection which is easy to install
- No utilities required
- Compact design which can be put in any orientation
- Solid-state trap sampling technology, no liquid impingers

## SAMPLING SERVICE LOGISTICS

1. Sampling kit shipped to customer
2. 10 minute installation
3. Unattended collection 4 – 72 hours
4. Send back to Entegris
5. Analysis report delivered within one week

## PERFORMANCE DATA



### PRESSURIZED GAS

N<sub>2</sub>, XCDA®, CO<sub>2</sub>, Ar, He, H<sub>2</sub>  
 Pressure required: 30 – 120 psig  
 Flow required: 6 slpm  
 Connection: 1/4" VCR

### AMBIENT AIR

Cleanroom air

Contaminants	Detection limits 72 hour sampling		Detection limits 6 hour sampling	
Fluoride (F <sup>-</sup> )	0.002 ng/L	2 pptV	0.044 ng/L	54 pptV
Chloride (Cl <sup>-</sup> )	0.002 ng/L	2 pptV	0.057 ng/L	38 pptV
Bromide (Br <sup>-</sup> )	0.002 ng/L	1 pptV	0.056 ng/L	17 pptV
Nitrite (NO <sub>2</sub> <sup>-</sup> )	0.002 ng/L	1 pptV	0.057 ng/L	29 pptV
Nitrate (NO <sub>3</sub> <sup>-</sup> )	0.005 ng/L	2 pptV	0.113 ng/L	43 pptV
Sulfite (SO <sub>3</sub> <sup>2-</sup> )	0.002 ng/L	1 pptV	0.044 ng/L	17 pptV
Sulfate (SO <sub>4</sub> <sup>2-</sup> )	0.002 ng/L	1 pptV	0.036 ng/L	14 pptV
Phosphate (PO <sub>4</sub> <sup>3-</sup> )	0.005 ng/L	1 pptV	0.115 ng/L	29 pptV
Acetate (C <sub>2</sub> H <sub>4</sub> O <sub>2</sub> <sup>-</sup> )	0.014 ng/L	6 pptV	0.339 ng/L	138 pptV
Formate (CHO <sub>2</sub> <sup>-</sup> )	0.005 ng/L	3 pptV	0.114 ng/L	60 pptV
Ammonium (NH <sub>4</sub> <sup>+</sup> )	0.004 ng/L	5 pptV	0.049 ng/L	66 pptV
Hydrocarbons (C6-C30 as toluene)	0.002 ng/L	1 pptV	0.028 ng/L	7 pptV
Refractory compounds (as HMDSO)	0.002 ng/L	1 pptV	0.028 ng/L	7 pptV

## FOR MORE INFORMATION

Please call your Regional Customer Service Center today to learn what Entegris can do for you.  
 Visit [entegris.com](http://entegris.com) and select the [Contact Us](#) link to find the customer service center nearest you.

## TERMS AND CONDITIONS OF SALE

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