

REVISION:

202-001-442

PRODUCT INFORMATION BULLETIN

FULL DISTRIBUTION REQUIRED

REVISION DATE:

ORIGINAL DATE: 03-29-22

1. SUBJECT:

Conversion from Helium to Argon

2. INSTRUMENT(S) AFFECTED:

628-series Analyzers

828-series Analyzers

928-series Analyzers

TruMac-series Analyzers

3. S/N EFFECTIVITY:

Not applicable

4. PARTS REQUIRED:

See Details below

5. DETAILS:

628-series and TruMac-series

NOTES:

- *Converting from Helium to Argon requires installation of one of the following kits.
633-103-121 CN628, CHN628 and FP628 Argon Conversion Kit
633-103-123 TruMac Argon Conversion Kit*
- *Installation of the 633-103-123 TruMac Argon Conversion Kit requires the unit to be operating with software version 1.30 or higher. A software upgrade kit is provided in the kit.*
- *Installation of the 633-103-121 CN628, CHN628 and FP628 Argon Conversion Kit on either a CN628 or CHN628 requires the unit to be operating with software version 1.31 or higher. A software upgrade kit is provided in the kit.*
- *Installation of the 633-103-121 CN628, CHN628 and FP628 Argon Conversion Kit on a FP628 requires the unit to be operating with software version 1.20 or higher. A software upgrade kit is provided in the kit.*
- *Once the Argon Conversion Kit is installed, Helium can no longer be used as a carrier gas in the unit. Helium gas will permanently damage the Argon TC Cell.*

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828-series and 928-series

About Argon Carrier Gas

- *These instruments support either helium or argon carrier gas. The type of carrier gas used may affect some instrument specifications.*
- *Argon or helium can be used as carrier gas. The system is designed to automatically adjust the Measure Flow based on the setting in this field. However, the Reference flow requires manual adjustment.*
- *Switching between argon and helium on a regular basis is not recommended. If the gas type is changed, it is advised to replace reagents in the scrubber tubes and in the reduction tube. The inert gas should remain ON for an extended period until the TC Signal is stable, indicating that the previous gas is flushed from the system.*
- *Precision and specifications may differ based on the input carrier gas used. Please refer to the Introduction section of the operator's Instruction Manual.*

Argon Carrier Gas

- *When packing the Reduction Tube, use quartz wool from the Accessory Pack on the top of the tube. Refer to Packing the Reduction Tube in the operator's Instruction Manual.*
- *Set the Carrier Gas to "Argon" under Instrument/System. Refer to System settings in the operator's Instruction Manual.*
- *Adjust the Inert Reference flow Mechanical Flow Controller to 50 cc/min. To check this setting, you must "Close" the Measure MFC in Instrument/General Maintenance. (The Reference flow should be 50 cc/min for both argon and helium carrier gas, but the Mechanical Flow Controller's output will change when you change gases, so it must be adjusted.) Refer to Adjusting the TC Reference Flow in the operator's Instruction Manual.*
- *Set the Carrier Gas for the method(s) to "Argon". Go to the Element Parameters page of the method and push Default for each parameter to reset that parameter to the default argon setting. Before doing this, the element parameters will be the helium defaults. When using Argon, setting the parameter "Use Profile Blank" to Yes is recommended (this option is only available for methods set to "Argon"). Refer to Method Settings in the operator's Instruction Manual.*
- *Set the blank and re-calibrate any method that was calibrated previously with helium. Remember that the specifications for precision and low-level performance are degraded slightly when using Argon carrier gas. The 3 cc dose loop is not recommended for use with argon for samples containing low levels of nitrogen. Please refer to the instrument specifications sheet for more information.*