

GC Column Installation Guide

Preliminary Check of the System

Inspect the injector septum and liner. Replace (or clean for the liner) if necessary. Verify gas traps (for oxygen and humidity) and replace if necessary. Always use gas purity traps on the carrier gas lines to extend the column's lifetime and to minimize the background noise.

Prepare Column for Installation

Your column is sealed under inert gas after the MEGA quality assurance test. Cut 2-3cm from both ends, install a nut and an appropriately sized ferrule on each end of the column. Cut an additional 1-2cm from each end of the column to remove ferrule fragments.

Connect Column and Confirm Flow

Connect the column to the inlet of Your GC at the instrument manufacturer's recommended insertion distance. Turn on the carrier gas. Confirm flow by immersing the column outlet in a vial containing solvent (i.e. Methanol or Hexane). Connect then the column to the detector (at the instrument manufacturer's recommended insertion distance). For some detectors (e.g., ECD, MS) a conditioning of the column before being connected to the detector is recommended. Consult also Your instrument manual.

Column Conditioning

Once the system has been checked for proper installation and absence of leaks, condition the column at 20°C above the final analysis temperature (on the basis of Your particular analytical method), but never exceed the stationary phase's maximum temperature reported on the labels of the column. For most applications 2-4 hours of conditioning is sufficient.

Grob Test (or Dedicated Test Mixtures)

Every single MEGA column is tested with the original Grob Test mixture (or with a dedicated mixture for custom columns) to assure the quality of the product. Inject the Grob Test mixture (or the dedicated mixture) that is included in the column's box to verify proper installation and performances of the system. Follow the chromatographic conditions reported on the column Quality Assurance Test sheet.

Column Storage and Cleaning

If chemical damage to the stationary phase does occur, try to remove 1-2m of the column (injection side); this could restore the column's performances. Our CROSSBOND phases are solvent proof and washables. Contact us to have more info about washing procedures for Your phase or any other suggestion. For the column long term storage (when is not installed on your GC), flame-seal or cap ends with septa immediately after You remove the column from Your GC. Keep then the column in her box.

MEGA recommends to use a Retention Gap in case You have to analyze "dirty" and/or non-volatile samples. This will helps to extend the column's lifetime. Retention Gaps are easily connected to the column using a Press-Fit connector.





6

