

Technical Bulletin

Umbilical Line Temperature on the Thermo Scientific Mercury Freedom System

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The Thermo Scientific Mercury Freedom System requires the use of a heated umbilical line to transport the sample and calibration gas between the probe and the instruments. The new set point for the controlled temperature of the heated umbilical has been reduced to 70 ° C (approximately 158°F).

Previously published documents may have suggested an operating temperature of 180° C and more recently of 120° C. However, during the months of September 2011 through May 2012, an extensive study was performed using a large test group of different types of plants and installations. Studies concluded that the operating temperature of the umbilical can be set as low as 70° C.

If the sample line is in an environment where the temperature may exceed 70°C, the sample line should be heated to a minimum of 10 degrees above the existing ambient temperature.

The sample line requires use of a temperature control device. Self limiting systems should not be installed and will not be supported by Thermo Fisher Scientific.