

What is the cause of a pressure increase after injections of blanks in HPLC - FAQ

Question: I observe an increase in pressure after injection of both samples and blanks. What could the problem be?

Answer: Sometimes this type of situation can point to particulate matter from a dirty or non filtered sample. This is less likely the case though if you see the increase with blanks as well. Verify that your solvents used for the blank are suitable for HPLC (sufficient purity, use of DI water and not just regular water, etc.). Blanks should always be filtered, just like samples.

Try switching to a new column and see if you observe the pressure increase again. If the pressure increase does not go away, the problem may not be in the column especially if the pressure is not consistently high. The pump assembly is a common cause of gradual pressure increases but there can be many other sources of this including check valves, software issues and others.

At this point it is best to consult with your instrument manual or with the manufacturer for how to properly service the pump.