

SGE Introduces Color-Coded Syringes



E001098, E001099, E001100

SGE has implemented significant changes to their chromatographic syringe line to make it easier to distinguish between the different volumes of syringes while experiencing improved technical performance.

The glass barrels of SGE autosampler syringes are now color-coded according to volume to make it easier and faster for an analyst to select the proper volume of syringe for different applications. For example, the 50 μL syringe has a purple barrel while the 10 μL syringe can be distinguished by its orange barrel. This color-coding also makes it easier for quick volume identification of syringes already installed in an autosampler.

The new color-coded syringes are now packaged in a clear 100% recyclable protective inner sleeve with a fully recyclable outer box with a window for easy visual identification of the product when stored in a drawer.



E001101

Newly introduced tighter physical specifications and design changes have greatly reduced or eliminated common problems including syringe adhesive contamination of the sample, sample carryover, and mechanical problems with the needle, plunger and barrel. These improvements provide superior technical performance for the analysts and have the added benefit of extending the life of the syringe.

Longer Life

Modifications to the inner surface finish of the syringe glass barrel and the design of the syringe components provide greater solvent resistance, a wider working-temperature range and improved operational smoothness. As a result of these modifications, the lifetime of the syringe can be as much as ten times greater when compared to SGE's current syringes.

Superior Performance

Elimination of syringe adhesive from the fluid path removes the possibility of the sample being contaminated by adhesive, sample carryover, or the possibility of the sample matrix dissolving the adhesive that holds syringe components together. This is accomplished by the addition of a press fit PTFE seal that fits tightly against the inner walls of the syringe and is flush to the end of the needle leaving no gaps and preventing contact of the sample with the syringe adhesive.

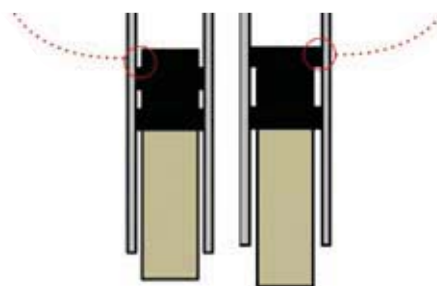
Additionally, the use of a new adhesive chemistry in the manufacturing of SGE syringes allows the syringe to be operated over a wider temperature range.

Improvements have also been made to the needle design. The needle and hub are permanently fused together, increasing the strength of the parts.

Reduced Carryover

Design improvements in the PTFE plunger tips and the PTFE seal inserts mentioned previously create a much tighter fit between the plunger tip of the barrel and the PTFE seal. A smoother glass surface ensures that the fluid is flushed out and no carryover occurs.

Superior Plunger Tip



Other tip designs make it impossible to completely expel sample.

SGE 2010 plunger tip sits flush against syringe insert, minimizing any potential carryover.

SGE has made significant changes to improve their syringe line for 2010. The changes in both packaging and syringe design make these products better with extended life, easier identification, and overall better performance for syringe customers.

For more information on any of our syringes, email our Technical Service Department at techservice@sial.com or visit us on the web at sigma-aldrich.com/syringes.