

Tyler Research Corporation

Stainless Steel Syringe for Campenot Series Nerve Cell Cultures

The Tyler Research stainless steel syringe is intended for the application of sterile silicone grease to the chamber septa of Teflon dividers used for Campenot-series nerve cell culture. It is a direct replacement for the inherently fragile glass tuberculin syringe described in the review paper “**Compartment Culture Analysis of Nerve Growth**” in *Cell-Cell Interactions: A Practical Approach*, B. Stevenson, D. Paul and W. Gallin, eds., Oxford University Press 1992, pp. 275-298.

The syringe terminates in a luer-lok fitting. Install a needle by centering the hub on the tapered nozzle and turning it clockwise until it seats firmly.

To load silicone grease, pull the plunger out and pack or inject the grease into the syringe barrel, taking care to avoid entrapping air. Insert the plunger into the barrel until the O-ring engages the walls of the barrel for a distance of approximately 5mm. Wipe excess grease from the outside of the syringe and prepare it for autoclaving.

If the O-ring should become damaged, it may be replaced with a 1/16” I.D. x 3/16” O.D. O-ring made from buna-N, nitrile, or silicone with a durometer rating of 65 – 75. Cut the damaged O-ring off of the piston with a scalpel or razor blade, and install the new O-ring by forcing it over the tapered end of the piston until it relaxes into the O-ring groove. If it should become necessary to remove the nozzle from the luer-lok fitting, remove the plunger and insert a long-series 1/8” hex (Allen) key into the barrel of the syringe until it engages the hex drive of the nozzle. Turn clockwise (from the perspective of the proximal or handle end of the syringe) approximately 4 full turns to unscrew the nozzle. When reinstalling the nozzle, wrap the threads at its base with Teflon tape and turn it clockwise into the barrel (from the perspective of the distal end of the syringe). Complete installation of the nozzle by engaging the hex head with the Allen key inside the barrel and turning it counterclockwise until it seats firmly.

