

Tyler Research Corporation

Drosophila Anaesthetization System DA-1

The Tyler Research Drosophila Anaesthetization System has been developed for the safe, effective anaesthetization of experimental insects for morphological sorting and genetic manipulation. The complete system (DA-1) consists of a perforated homopolymer acetal containment tube (DA-1.1) that fits the opening of standard glass culture flasks (creamery bottles), an acrylic gassing chamber (DA-1.2), and a porous polyethylene/acrylic sorting plate (DA-1.3). A gentle stream of pressure-regulated carbon dioxide gas is directed into inlet ports of the gassing chamber and sorting plate as required, anaesthetizing the insects. This system is far safer and more effective than traditional ether anaesthetization. Insects may be kept immobilized on the sorting plate for prolonged periods of observation without adverse effects.

The surface of the sorting plate measures 70mm x 150mm and the module is 10mm thick. Inlet ports in the sorting plate and the gassing chamber are designed to accept 2mm or 3mm I.D. silicone or vinyl tubing.

A regulated source of CO₂ gas is required to complete the system.



All components may be cleaned with mild detergent and warm water, rinsed in distilled or deionized water, and left to air dry. While the culture medium will not harm the containment tube or the gassing chamber, it is important to avoid contaminating the delicate porous surface of the sorting plate as it may become stained or even clogged with foreign material, reducing its effectiveness. If this occurs, a thorough cleaning with detergent and water pulled through the membrane by applying a vacuum to the gassing port may clear the pores.