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50 YEARS

# POLYETHYLENE
# 5 cc AMPOULES

PRODUCED AND DISTRIBUTED BY:
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## PROCEDURES AND PREPERATION

### 1) Preparation of Polyethylene Ampoules for Weighing

The polyethylene ampoules from CANUS PLASTICS INC. and are shown in Figure 1-(1)*. The ampoules are prepared for use by stretching out the neck to a capillary
tube < 0.1 cm i.d. and r 10 cm long as shown in Figure 1-(2). The capillary tube is cut near the end (Figure 1-(3)). Ampoules are stored in this form until required
for use. Then solution is drawn into the ampoule by squeezing the walls, immersing the capillary tip in solution and releasing the squeeze. The tip is wiped dry and the capillary tube is cut with a razor blade to a suitable length of 4 to 5 cm as in Figure.

The partially filled ampoule is placed in the balance room for a period sufficient to allow it to reach thermal equilibrium (usually about a half hour).

### 2) Procedure for Delivery of Samples of Solution Directly from a Polyethylene Ampoule

The polyethylene ampoule henceforth is handled with long forceps. First, two or three drops of solution are expelled from the ampoule to a waste container in order to rinse the
capillary and tip, and thus eliminate an error which would result if tiny droplets had remained stuck along the inside of the capillary at the time of filling and evaporated later. The drops are expelled from the ampoule by inverting it over the waste can, gently squeezing the walls, and gently releasing the squeeze.

Next the ampoule is weighed twice or until duplicate weighings agree. The desired number of drops are delivered gently to a source mount (Figure 2) or into a source container, and the ampoule is reweighed in duplicate. The difference in weight represents the sample size delivered to the source mount or container. Another sample of solution is transferred to a second source mount, the ampoule is reweighed, etc., and thus a series of samples is prepared.

## Technique for the Elongation of the Neck of Polyethylene Ampoules

### Al Equipment Required:

(1) Small glass-blowing torch or Bunsen burner - a hot flame is not desirable as polyethylene is quite soft at 1000C neither is a wide flame desirable.

(2) Forceps.

**A2 Procedure**:

The neck of the ampoule is stretched in much the same way as glass tubing. The base of the ampoule is held between the thumb and first two fingers, and the opening at the top end is supported with forceps. The ampoule is held approximately horizontally over the flame and rotated slowly, heating the thick narrow portion of the neck. Gradually most of the top 2 cm of the ampoule becomes transparent. Then the ampoule is held away from the flame and stretched slowly to the desired length. (If it is stretched quickly it will be pulled into two pieces). It is held taut until it regains its translucent appearance.

Sometimes during the stretching of the polyethylene only one small section becomes narrow; this is because it is much hotter than the remainder of the transparent polyethylene. A convenient trick is to breathe onto this short hotter section maintaining the tension all the while; gradually it cools and becomes translucent, and then the remainder of the neck may be stretched more uniformly.

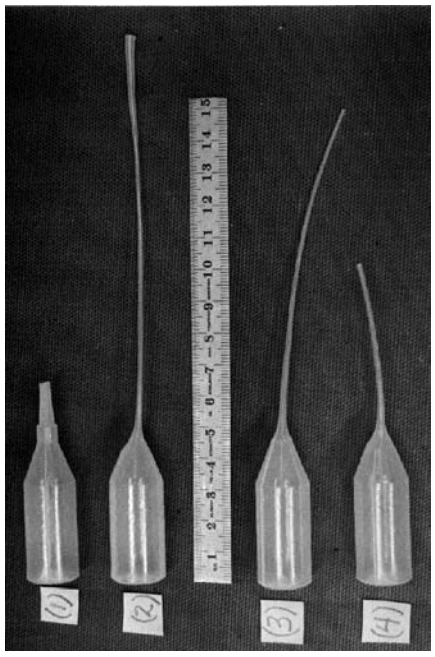

Fig 1

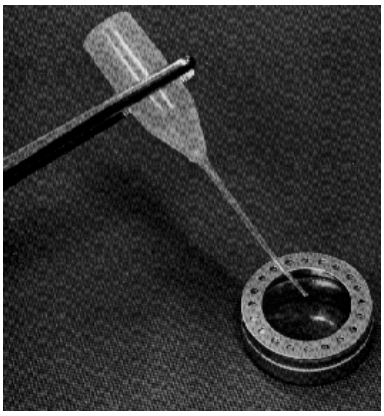
Fig 2

# PRICES :

| | |
|---|---|
| 100 TO 1000 | .65 EACH |
| OVER | .55 EACH |

NOTE: PRICES ARE IN CANADIAN FUNDS, DELIVERY AND ASSOCIATED TAXES OR LEVIES ARE EXTRA.