

GUIDELINES FOR S-35 LABELING

Labeling of cells using S-35 is a common procedure. Due to the volatile nature of the compound, we often see gross contamination of incubators and bench tops during quarterly lab surveys. The following measures should be taken to reduce the levels of contamination that occur from this procedure.

1. All handling of the S-35 at room temperatures must be done in a fume hood equipped with an external exhaust or charcoal filter.
2. You may wish to follow the manufacturers recommendations regarding the venting of the vial before use. These may be found on the package insert included with every shipment.
3. Place a shallow tray of activated charcoal in the incubator at the same time as your cells. This will trap S-35 volatiles. Discard the charcoal as radioactive waste after each labeling. The high humidity within the incubator tends to reduce its effectiveness.
4. Discard the water in the water pan after each labeling. This water should be poured into the liquid waste container.
5. To prevent buildup of contamination in the incubator, after each labeling the inside surfaces should be wiped down with a detergent and water. Pay special attention to the inner door, the door gasket, and the shelves. A GM survey meter will enable you to locate gross contamination.

NOTE: Plastic containers can be used as mini-containments within the incubator to reduce contamination. Below are two variations.

1. Placement of the culture dishes inside a larger (say 14" x 10" x 3") plastic container with tight fitting lid. If the atmosphere is allowed to equilibrate before the lid goes on, the CO₂ trapped within is adequate for several days of incubation time. The containers should be opened in a fume hood.
2. Placement of the culture dishes along with a pan of charcoal inside a larger plastic container with perforations in the lid. This allows full gas circulation but tends to localize the volatile S-35.