

Product Specification Sheet

Ultra Clear Cellophane for Drying Gels

- Outperforms conventional plastic film
- Laboratory tested for gel drying
- Consistant porosity and quality

The membrane used to air dry gels is the most important component. This ultra clear (0.1mm thick) cellophane provides the optimum porosity to ensure uniform drying and to prevent cracking of gels.



Instructions

A **DUAL SHEET METHOD** - This is the most commonly used method for long-term storage.

- 1. Stain and de-stain the gel as normal, adding10% glycerol to the de-stain.
- 2. Cut a piece of cellophane to the size of the solid backing plate, wet the cellophane with water (do not soak) and smooth over the backing plate. (Hint: Cut from the roll the length of cellophane needed, then allow the curly nature of the cellophane to re-roll the cellophane. Cut to the proper width with a single scissors snip.)
- 3. Center the gel on the backing plate.
- 4. Smooth a second sheet of wet cellophane over the gel, clamp the frame over this sheet with several binder clips, and dry horizontally overnight.
- 5. Remove the dried gel from the frame, cut off excess cellophane and store gel flat. Gels can be stored indefinitely if not exposed to humidity fluctuations.
- B. SINGLE SHEET METHOD Most commonly used for radiography and fluorography of gels.
- 1. Stain and de-stain the gel as normal, adding 3% (not 10%!) glycerol to the de-stain.
- 2. If for fluorography, soak the gel in the flourography solution for a couple of minutes.
- 3. Center the gel directly on the solid backing plate and overlayer with a piece of wet cellophane cut to the size of the backing plate. Clamp the frame in place with several binder clips.
- 4. Allow the gel to dry completely. Carefully remove the gel from the frame, noting which side is without cellophane. Lay photographic film on the non-cellophane side for exposure. Gel must be sealed in a humidity sealed environment for long term storage.

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- C. <u>TWO FRAME METHOD</u> This method is the same as the two-sheet method, except the backing plate is replaced by a second frame of the same size. These gels dry twice as fast.
- D. SPECIAL METHOD to ELIMINATE CRACKING of SILVER STAINED GELS and
 HIGH PERCENTAGE ACRYLAMIDE GELS Recommended Method

Soak gels in 20% ethanol, 10% glycerol for 30 minutes before drying. Some scientists use a 10% EtOH, 5% glycerol soak.

E. ALTERNATE METHOD for SILVER STAINED GELS - spread two drops of 10% SDS on each side of the gel.

F. HINTS:

- 1. Removal of the well-formers at the top of the gel will give more uniform drying.
- 2. Many scientists wet the cellophane with the de-stain rather than water.
- 3. Partially dry gels will curl. Flatten them overnight with a couple of heavy books.
- 4. It is best to cut the cellophane with dry hands.

REFERENCES: The earliest reference to usage of a gel drying frame is in "SDS Microslab Linear Gradient Polyacrylamide Gel Electrophoresis," Matsudaira, P.T., and Burgess, D.R., Analytical Biochemistry, Vol. 87, pp. 386-396, (1978). Please use this reference in future publications.