

# AcrylaGel™

# Bis-AcrylaGel™

**national  
diagnostics**

- Ultra-Pure
- Easy to Use
- Deionized and Prefiltered
- Forms Crystal Clear Gels

**WARNING:** AcrylaGel and Bis-AcrylaGel contain acrylamide, which has been found to be neurotoxic. Protective eyewear and gloves should be worn while handling these products. If accidental exposure occurs, contact a physician immediately.

National Diagnostics' AcrylaGel (EC-810) is a ready-to-use 30 percent acrylamide solution in distilled, deionized water. AcrylaGel can be crosslinked with Bis-AcrylaGel (EC-820), our ready-to-use solution of 2 percent methylene-bisacrylamide. Alternatively, any powdered acrylamide crosslinking reagent can be used with AcrylaGel.

Store solutions tightly capped in a dark area at room temperature.

## MIX GEL SOLUTION

Calculate the amount of AcrylaGel and Bis-AcrylaGel needed to make your gels by using the formulas provided (Figure 1). Using your normal buffers and distilled water, bring to the total volume desired. Pour the solution into an Erlenmeyer flask with a side arm.

Figure 1: Calculating the amount of AcrylaGel and Bis-AcrylaGel needed

$$V_a = (A * V_t) / 30$$
$$V_b = (A * C * V_t) / 200$$

where,

$V_a$  = volume of AcrylaGel to be used (mL)  
 $V_b$  = volume of Bis-AcrylaGel to be used (mL)  
 $V_t$  = total volume of gel casting solution desired (mL)  
A = % acrylamide desired in gel  
C = % crosslinker desired = 100 \* (bis [g] / acrylamide [g])

EXAMPLE: To make 100 mL of a 10% acrylamide gel 2.7% cross-linked with bis, calculate the volume to be added as follows:

$$V_a = (10 * 100) / 30 = 33.3 \text{ mL AcrylaGel}$$
$$V_b = (10 * 2.7 * 100) / 200 = 13.5 \text{ mL Bis-AcrylaGel}$$

In most cases, AcrylaGel and Bis-AcrylaGel will gel without degassing. However, if degassing is desired add a stirring bar to the solution and put a stopper on the flask. Degas the solution under vacuum for five minutes while stirring on a magnetic stirrer.

## ADD APS, CAST GEL

Add 1.0 mL of 10% (w/v) freshly prepared ammonium persulfate for every 100 mL of gel casting solution. Swirl gently to mix. Add 0.1 mL TEMED for every 100 mL of gel casting solution. Swirl gently to mix. Pour the solution into the gel casting cassette. The gel should begin to set in 10-20 minutes.

**NOTE:** After two hours of polymerization wrap each end of the gel cassette with clear plastic wrap. This is important to keep the ends of the gel from drying and to maintain sample well integrity. Appropriately wrapped gels may be stored for up to 48 hours.

## SUGGESTIONS FOR BEST RESULTS

- Clean glass plates thoroughly. Rinse with ethanol and wipe dry. Apply Glass Free (EC-621) to one plate to ensure release after electrophoresis.
- Use fresh, highly qualified buffers and initiators.
- Degassing will ensure result reproducibility.

### AcrylaGel

EC-810 450 mL  
1 L

### Bis-AcrylaGel

EC-820 450 mL  
1 L

## For additional information and order placement:

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