



PRODUCT INFORMATION

Acrylamide/Bis-acrylamide, 30% solution (Mix Ratio 29:1)

Product information for A0010:

Product Name: Acrylamide/Bis-acrylamide, 30% solution (Mix Ratio 29:1)

Product Code: A0006

Storage Temperature: 2–8 °C

Product Description:

The Acrylamide/Bis-acrylamide solution is used in protein and nucleic acid electrophoresis. The solution concentration (30%) is based on the total weight of both the acrylamide and bis-acrylamide. The mix or feed ratio (w/w) of acrylamide:bis-acrylamide is 29:1. The solution is prepared from electrophoresis grade acrylamide and bis-acrylamide in ultrapure water. The product is passed through a 0.2 µm filter.

The product is suitable for electrophoresis.

Precautions and Disclaimer:

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store the product at 2–8 °C & darkness.

Procedure

The following formula may be used to calculate the volume of stock solution required for a gel concentration of <30%:

$$V_r = \frac{C \times V_t}{30\%}$$

Where:

V_r: is the required volume of Acrylamide/Bis-acrylamide, 30% Solution

C: is the final desired acrylamide concentration (%)

V_t: is the total volume of final solution to be prepared

To prepare gels for use in the Laemmli system, the following solutions may be combined as indicated in Tables 1 and 2.

Solution A - Acrylamide/Bis-acrylamide 30% Solution, Catalog Number A0010



Solution B - Combine: Catalog No. Amount
Tris Base TB0194 7.28 g
TEMED TB0508 92 ul
Adjust the pH of the solution to 8.9 with 1 M HCl and add ultrapure water to 40 ml final volume.

Solution C - Combine: Catalog No. Amount
Tris Base TB0194 1.21 g
TEMED TB0508 92 ul
Adjust the pH of the solution to 6.9 with 1 M HCl and add ultra pure water to 20 ml final volume.

Solution D - Dissolve 1 g of Sodium Dodecyl Sulfate (Catalog Number SB0485) in 10 ml of ultrapure water and filter.

Solution E - Dissolve 60 mg of Ammonium Persulfate (Catalog Number AB0072) in 5 ml of ultrapure water.

Prepare fresh each day. See Tables 1 and 2 for mixing instructions.

Table 1.
Separating Gel Solution (Final volume = 20 ml)

Component	Final Acrylamide Concentration									
	5%	6%	7%	8%	9%	10%	11%	12%	15%	20%
Ultrapure Water (ml)	10.47	9.80	9.13	8.47	7.80	7.13	6.47	5.80	3.80	0.47
Solution A (ml)	3.33	4.00	4.67	5.33	6.00	6.67	7.33	8.00	10.00	13.33
Solution B (ml)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Solution D (ml)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Solution E (ml)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

PS: Gel Percentage and protein Size

GEL PERCENTAGE	PROTEIN SIZE
6%	50~150 kD
8%	30~90 kD
10%	12~80 kD
12%	12~60 kD
15%	10~40 kD



Table 2.

Stacking Gel Solution (Final volume = 8 ml)

Component	Final Acrylamide Concentration
	3%
Ultrapure Water (ml)	5.52
Solution A (ml)	0.80
Solution B (ml)	1.00
Solution D (ml)	0.08
Solution E (ml)	0.60