Technical Bulletin 😐 Zm Tech Scientifique: Innovation and Development of Laboratory Accessories and Bio-Technologies

SDS-PAGE Gel Solution (WA):

(Catalog #: WA-150 (15%); WA-100(10%); WA-075(7.5%))

Sizes: Resolving gel solution-A (500mL) ; Stacking gel solution-B (100mL) (Note*: Not includes the fresh 10%APS)

Storage: 2-8°C.

- Features and Benefits:
- Cast resolving gel and stacking gel at the same time.
- No requiring overlay solution (water or n-butanol) between resolving gel and stacking gel.
- All-IN-One solution including Acrylamide-Bis, SDS, Tris-HCI (pH8.8 or pH6.8) & TEMED.

Simple Protocol for Making a mini-SDS-PAGE gel (8x10cm):

- 1. Set the casting frames (clamp two glass plates in the casting frames) on the casting stands. Note*: Pre-warm the gel solution A and B at room temperature might reduce the gel polymerize time.
- Prepare 10 ml of the <u>resolving gel solution-A</u> in a clean 50mL tube. Add 100 ul of fresh 10%APS. Swirl the solution gently and mix well.
- 3. Prepare 4 ml of the **stacking gel solution-B** in a 15mL tube. Add 20 ul of 10%APS. Swirl the solution gently and mix well.
- 4. Pipet appropriate amount of resolving gel solution into the gap between the glass plates. Wait for 1 minute to let it gelate.
- 5. Pipet appropriate amount of stacking gel solution into the gap on top of the resolving gel solution. Insert the comb without trapping air under the teeth.
- 6. Wait for 20-30 minutes and the gel is ready to use for protein electrophoresis.

| Additional information: | | | | |
|------------------------------------|-------------------------|----------------------|------------------|---------------------------------|
| 5X Sample buffer (loading buffer): | | 1x Running Buffer: | | |
| 10% w/v SDS | | 25 mM Tris-HCI | | |
| 10 mM. Dithiothreitol, | | 200 mM Glycine | | |
| 20 % v/v Glycerol | | 0.1% (w/v) SDS | | |
| 0.2 M Tris-HCI, pH 6.8 | | | | |
| 0.05% Bromophenol blue | | | | |
| Acrylamide (%) | M.W. Range | Thickness of the gel | Volumes of stack | <u>king & resolving gel</u> |
| 7.5% | 50 kDa - 500 kDa | 0.75mm | 2mL | 4mL |
| 10% | <u>20 kDa - 300 kDa</u> | <u>1.0 mm</u> | 3mL | <u>6mL</u> |
| <u>15%</u> | 3 kDa - 100 kDa | <u>1.5 mm</u> | 4mL | 8mL |

Precautions and Disclaimer: This product and procedure described are intended for R&D use only. Purchase of this product does not convey a license to perform any patented process.

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