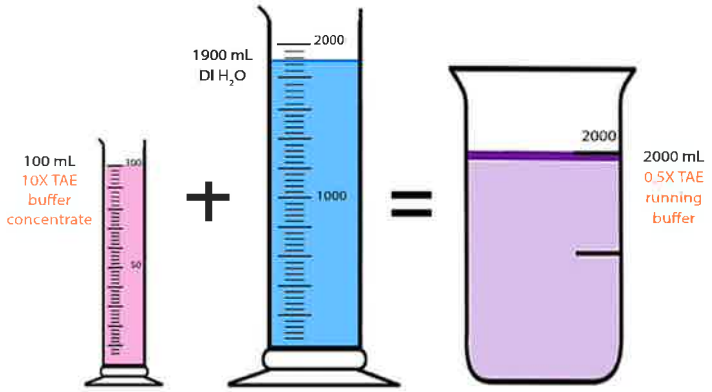
## Dilution Instructions for
## TAE Buffer Concentrate (Cat. # M3101TAE)

Add 1 part TAE buffer concentrate to 19 parts deionized or distilled water

For 2000 mL 0.5X TAE running buffer:
Mix 100 mL 10X TAE buffer concentrate and 1900 mL $H_2O$




Mix well and you're ready to run a TAE gel!

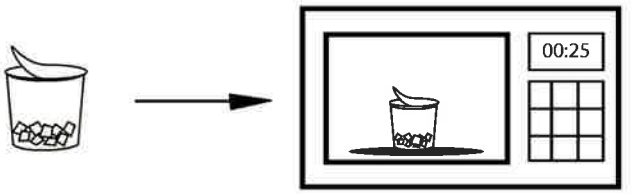
MiniOne TAE Buffer Dilution Chart

| 10X TAE buffer concentrate | DI water | Final 0.5X TAE buffer volume |
|---|---|---|
| 20mL | 380 mL | 400 mL |
| 50 mL | 950 mL | 1000 mL |
| 75 mL | 1425 mL | 1500 mL |
| 100 mL | 1900 mL | 2000 mL |

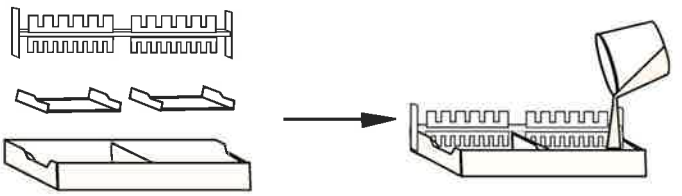
Remarks:

1. Always dilute TAE buffer concentrate to 0.5X TAE running buffer before use.
2. We recommend diluting in batches for accuracy. Minium of 400 mL per batch.
3. Avoid re-using buffer as it affects ion concentration and may give inconsistent run time and results.

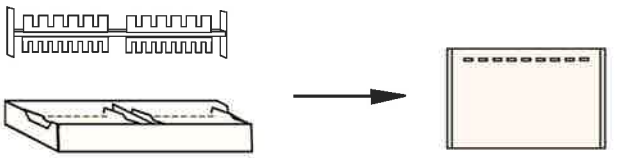
## GreenGel Cup Instructions




Partially peel the plastic film and microwave 25 seconds* until gel solution bubbles (boils) for approximately 3 seconds and all chunks are dissolved. For best results, do not microwave more than 5 cups at a time.



Allow to cool for 15 seconds prior to pouring.
Place trays and combs into casting stand.
Pour molten agarose and let set 10-15 min until opaque.

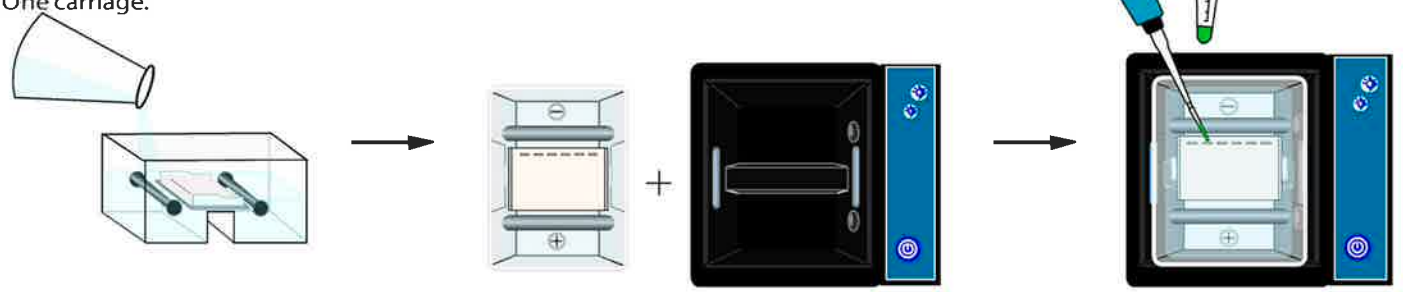


Carefully remove combs when gel is ready.
Remove gel tray with solidified gel from the Casting System.
Your gel is ready to run!

*heating times may vary depending on the microwave strength. If not fully dissolved, continue heating in 5-10 second intervals.

## Load and Run a Gel

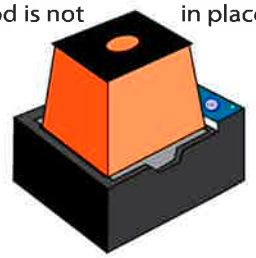
1. Cast your gel and dilute TAE concentrate to 0.5X TAE Running Buffer (instructions on reverse). Place the gel inside the tank with the wells at the negative end. Pour enough 0.5X TAE into the clear plastic tank to thinly cover the gel (~135 mL). DO NOT pour buffer directly into the black carriage. Place the filled tank and gel into the black MiniOne carriage.



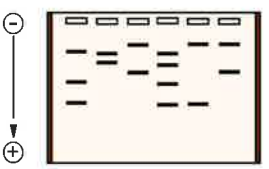
2. Turn on the low intensity LED by pressing the button to aid in loading the samples. Load 10 uL of each sample using a pipette. Take care not to damage or puncture the wells.



3. Once the gel is loaded, do not move it. Make sure the power supply is plugged in and place the photo hood on the carriage. Turn on the power by pressing the button. The power (indicated by a green LED) will not turn on if the photo hood is not in place.



4. Allow the gel to run approximately 20 mins or until DNA separation is sufficient. After your run is complete, turn off the power by pressing the button.



5. Document your results. Wipe off condensation from the inside of the hood with a soft cloth. Place your cell phone or camera directly on the photo hood to take a picture of the DNA.

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