DNA ELECTROPHORESIS

TBE buffer 10x TBE (1 liter):
108 g Tris
55 g Boric acid in 900 ml distilled water.
Add 40 ml 0.5 M Na2EDTA (pH 8.0)
Adjust volume to 1 Liter.
Store at room temperature.
Note: 10x TBE may take some time to dissolve, even with fast stirring
TBE can be diluted to 1X prior to use in electrophoresis, 0.5x is acceptable as well.

20% acrylamide (7 M urea) solution for gel

210.2 g urea
250 ml 40% acrylamide/bis solution
25 ml 10X TBE buffer
Mix and adjust volume to 500 ml

10% APS
1 g APS
9 ml H2O
Mix and adjust volume to 10 ml

Gel
7 ml 20% acrylamide (7M) solution
70 uL 10% APS
7 uL TEMED
Hardening time – 10 min

Running conditions:

1) 10 min at 300 V
2) Load DNA
3) 5 min at 150 V
4) 1h at 300 V

Loading Buffer:
720 mg urea
60 uL 0.5 M EDTA or 600uL 50 mM EDTA
3 uL 1M Tris buffer (pH 7.4)
Adjust total volume to 1.5 ml