# Embi Tec Pre-Cast Gel Guide

# **Gel Compatibility**

RunOne<sup>™</sup> Pre-Cast Gels do not require a specific gel apparatus. They will work in a gel box which has a platform of sufficient size. We recommend using the RunOne<sup>™</sup> Electrophoresis System, as we have optimized all run parameters on this system.

## **Buffer Capacity**

TBE has a higher buffer capacity than TAE. The buffer capacity for TAE is relatively low and can become exhausted over long runs.

## **Temperature**

TBE tends to run cooler than TAE. For example, when TBE is compared to TAE in the RunOne™ Electrophoresis System, the TBE buffer is 5-10°C cooler over a 40 minute run at 100V.

#### Resolution

The resolving power of TAE and TBE are nearly identical with the exception of supercoiled DNA which is better resolved in TAE than in TBE.

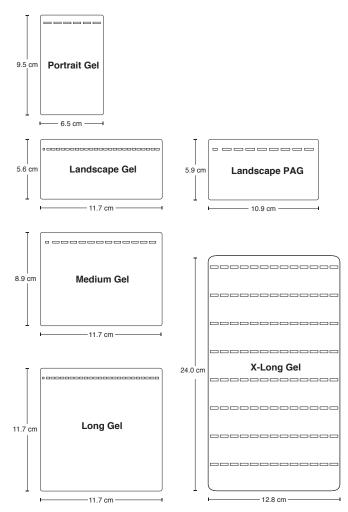
#### **Run Times**

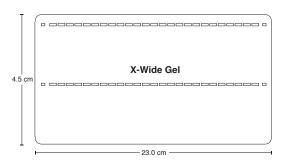
Double stranded linear DNA migrates about 10% faster through TAE than TBE, but because TBE runs cooler, the bands are sharper and straighter.

#### **Shelf Life**

- 0.8%-3% Agarose gels with EtBr 7 months at room temperature
- 4% Agarose gels with EtBr 3 months at room temperature
- GreenGel -
  - 3 months at room temperature
- Agarose gels with no stain -1 year at room temperature
- Polyacrylamide gels -6 months at 4°C

## **Gel Size Guide**





### **Resolution Guide**

