

# FASTER BETTER™

## MEDIA LLC

### HOW TO USE SB™ low-conductive electrophoretic medium:

SB substitutes for TAE or TBE in most slab gel systems. Dilute 20X SB with deionized/distilled water to 1X SB. Use 1X SB in gel reservoirs for horizontal or vertical gels. Agarose or acrylamide gels, with optional 0.2 ug/ml ethidium bromide or denaturants, can be made with 1X SB. For horizontal gels, gel thickness should be no more than 5 mm. The overlay of conductive medium should be no more than 1 to 2 mm in order to keep the overall conductance of the system low. 0.7 - 3% agarose can be used. Mix the sample and any required water in 5X SB loading medium to form a 1X SB sample for loading. As with all electrophoretic systems, the salt content of the samples should be as low as possible and should be similar among the reference markers and the analysed samples. Load the wells.

The voltage for SB gels is usually 3 to 5 times that of TAE or TBE gels. The time needed for the electrophoretic run can be reduced even more, due to improved resolution.

20X SB and 5X SB loading medium are stable at RT, will not precipitate, and tolerate cooling and freezing. For special purposes, such as resolution of DNA less than 100 bp, dilutions of SB as low as 0.1X can be employed at very high voltage.

Equipment used must have failsafe electrical protection.