

reagents & CHEMICALS

buffers&DYES

Cleaver Scientific offers a range of concentrated buffers and loading dyes to complement the EZEE multisub horizontal electrophoresis range and to offer a complete solution for the users. These are ideal for laboratories running horizontal nucleic acid gels on a daily basis that require high quality reagents for reproducible results.

TBE and TAE buffers Nucleic acid agarose gel electrophoresis is usually conducted with either Tris-acetate-EDTA (TAE) buffer or Tris-borate-EDTA (TBE) buffer. While TAE buffer provides faster electrophoretic migration of linear DNA and better resolution of supercoiled DNA, TBE buffers have a stronger buffering capacity for longer or higher voltage electrophoresis runs. The buffers are available either as ready-to-use stock solutions (50xTAE and 10xTBE) or as dry powder that just need to be reconstitute in distilled water to provide a 10x stock solution (TBE only)



TECHNICAL SPECIFICATIONS

TAE	FINAL CONSTITUENT CONCENTRATIONS: TRIS ACETATE 0.04M, EDTA 0.001M, pH 8.0
TBE	FINAL CONSTITUENT CONCENTRATIONS: TRIS 0.089M, BORIC ACID 0.089M, EDTA 0.002M, pH 8.3

10X Bromophenol Blue DNA loading dye, the standard tracking dye for electrophoresis. The charge-to-mass ratio of bromophenol blue allows it to co-migrate with smaller molecules within agarose and PAGE gels (e.g. at 300bp in a standard 1% agarose, TBE gel) which, with its conspicuous dark blue colour, makes it the perfect tracking dye to monitor the progress of electrophoresis runs. DNA loading dye is supplied in 1ml volumes for easy handling.

Orange G Loading dye 1x (with ficoll) Used as a marker in PAGE and Agarose electrophoresis of DNA, as it migrates through the gel consistently with smaller DNA fragments. Contains sucrose and Xylene Cyanol. Used as a 1x solution.

RNAse free water, DEPC-treated to eliminate enzyme activity and then autoclaved, this sterile highly purified water product is perfect for use in PCR and Northern blotting techniques. RNAse-Free water is available either as a single 250ml bottle or in fifty 5ml aliquots to prevent cross-contamination.

Purified water (18 mega Ohms) for use with sensitive experimental procedures often needs verifying as pyrogen free, this is done using the LAL test or Limulus (Horseshoe crab) amoebocyte lysate assay. The LAL test is extremely sensitive to endotoxins which are the result of bacterial lysis. BP Grade Sterile Water has endotoxins removed by electrostatic filtration at the final purification stage prior to autoclaving. The LAL tested water conforms to the standard having less than <0.25EU/ml to ensure the water is of pr-requisite quality. This product is therefore pyrogen free. CFU>0 WFi compatible.

ORDERING INFORMATION

POWDERED AND LIQUID BUFFERS

CSL-TBEP	Powdered Tris-Borate-EDTA Running Buffer, - to make 10x stock/1L – 10 sachets (1 litre / pack)	TBE10X5	Buffer Tris-Borate-EDTA Running Buffer, 10 x 5L
TBE10X1L	Buffer Tris-Borate-EDTA Running Buffer, 10 x 1L	TAE50X1L	Buffer Tris-Acetate-EDTA Running Buffer, 50 x 1L
CSL-LOADDYE	10x Bromophenol Blue Loading Dye, 1ml	TAE50X5L	Buffer Tris-Acetate-EDTA Running Buffer, 50 x 5L
CSL-ORANGEDYE	Orange G Loading Dye, 1ml	CSL-LOADDYE10	10x Bromophenol Blue Loading Dye, 10ml
RFW250	RNAse-Free Water, 1x250ml	RFW50X5	RNAse-Free Water, 50x5ml
UPW1000	BP Grade Sterile Water, 1000ml		