

PE (Plymouth Erdschreiber)

Stocks	per 1000 cm³
(1) Salt solution	
NaNO ₃	200.0 g
Na ₂ HPO ₄ ·12H ₂ O	20.0 g
Medium	per 1000 cm³
Filtered 95% natural seawater *	950.0 cm ³
Soil extract (SE1 - see below)	50.0 cm ³
Salt solution (1)	1.0 cm ³

* Filter natural seawater and reduce to 95% using glass distilled water. Autoclave.

Ingredients above should be autoclaved separately and added together cold using aseptic techniques. Sterilise for 15 minutes at 15 psi and use when cooled to room temperature.

SE1 (Soil Extract 1)

used in media for marine algae

Preparing the soil

Site selection for a good soil is very important and for most purposes a soil from undisturbed deciduous woodland is best. Sites to avoid are those showing obvious signs of man's activity and particular care should be taken to avoid areas where fertilizers, crop sprays or other toxic chemicals may have been used.

A rich loam with good crumb structure should be sought. Stones, roots and larger invertebrates should be removed during an initial sieving through a 1 cm mesh. The sieved soil should be spread to air dry and hand picked for smaller invertebrates and roots. It should be turned periodically and picked over again. When dry it may be sieved through a finer mesh (2-4 mm) or stored as it is prior to use.

Medium

Soil is prepared as above. Air-dried soil and twice its volume of supernatant distilled water are autoclaved together at 15 psi for 2 hours and left to cool. The supernatant is then decanted and filtered through Whatman No 1 filter paper, then distributed to containers in volumes suitable for making up batches of media. The aliquots and their containers are autoclaved for an appropriate length of time (e.g. 1 litre or less for 15 minutes) and are then kept in a cool place (e.g. a refrigerator) until required.