

(2) Na<sub>2</sub>HPO<sub>4</sub>

### QF 09 Media Preparation Recipe Template

1.2 g

Revision: 001 Approved: 30APR20

# **MErds (Modified Føyns Erdschreiber Medium)**

Marine protozoa

Stock		per 100 ml
	(1) NaNO₃	20.0 g

Medium per litre

SES medium - See below 100.00 ml Stock solutions 1 & 2 1.0 ml each

Make up to 1 litre with filtered natural seawater. Autoclave at 15 psi for 15 minutes. It may be necessary to filter final medium to avoid problems with precipitation.

# **SES (Soil Extract with Added Salts)**

Stocks			р	er litre
	(1) (2) (3)	K <sub>2</sub> HPO <sub>4</sub> MgSO <sub>4</sub> .7H <sub>2</sub> O KNO <sub>3</sub>	1	.0 g .0 g 0.0 g

Medium	per litre

Stock solutions 1 - 3	20.0 ml each
Soil extract (*SE - see overleaf)	100.0 ml

<sup>\*</sup> At the CCAP, SE1 is used for marine algae, SE2 for freshwater and terrestrial protozoa.

Make up to 1 litre with deionized water and autoclave at 15 psi for 15 minutes.

Reviewed: 10<sup>th</sup> August 2020

Created on: 05 Nov 2019



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### SE1 (Soil Extract 1)

Used in media for marine algae and protozoa

### 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 handpicked for smaller invertebrates and roots. It should be turned periodically and picked over again. When dry sieve through a finer mesh (2-4 mm) and store in an airtight container away from light and heat.

#### 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 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.

## SE2 (Soil Extract 2)

Used in media for freshwater and terrestrial protozoa

#### 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 handpicked for smaller invertebrates and roots. It should be turned periodically and picked over again. When dry sieve through a finer mesh (2-4 mm) and store in an airtight container away from light and heat.

#### 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 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. 0

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