

## FDMed

### Stocks

### per 100ml

|                                                     |          |
|-----------------------------------------------------|----------|
| (1) Tris-HCl pH 7.5                                 | 15.76 g  |
| (2) NaNO <sub>3</sub>                               | 4.25 g   |
| (3) NaHCO <sub>3</sub>                              | 1.68 g   |
| (4) MgSO <sub>4</sub> ·7H <sub>2</sub> O            | 2.46 g   |
| (5) K <sub>2</sub> HPO <sub>4</sub>                 | 5.80 g   |
| (6) CaCl <sub>2</sub> ·2H <sub>2</sub> O            | 3.68 g   |
| (7) Trace elements:                                 |          |
| Na <sub>2</sub> EDTA                                | 4.36 g   |
| FeCl <sub>3</sub> ·6H <sub>2</sub> O                | 3.15 g   |
| H <sub>3</sub> BO <sub>3</sub>                      | 0.618 g  |
| MnCl <sub>2</sub> ·4H <sub>2</sub> O                | 0.18 g   |
| ZnSO <sub>4</sub> ·7H <sub>2</sub> O                | 0.022 g  |
| Na <sub>3</sub> VO <sub>4</sub>                     | 0.018 g  |
| CoCl <sub>2</sub> ·6H <sub>2</sub> O                | 0.01 g   |
| Na <sub>2</sub> MoO <sub>4</sub> ·2H <sub>2</sub> O | 0.006 g  |
| CuSO <sub>4</sub> ·5H <sub>2</sub> O                | 0.0025 g |

### Medium

### per litre

|                                                     |              |
|-----------------------------------------------------|--------------|
| Na <sub>2</sub> SiO <sub>3</sub> ·9H <sub>2</sub> O | 0.76 g       |
| Stock solutions 1 - 4                               | 10.0 ml each |
| Stock solution 5 - 6                                | 1.0 ml each  |
| Stock solution 7 (Trace elements)                   | 0.1 ml       |

Make up to 1 litre with deionised water. Adjust pH to **7.5** with 1M NaOH or 1M HCl prior to autoclaving. Autoclave at 15 psi for 15 minutes.

### Reference

Gérin, S., Delhez, T., Corato, A. et al. (2020). A novel culture medium for freshwater diatoms promotes efficient photoautotrophic batch production of biomass, fucoxanthin, and eicosapentaenoic acid. J Appl Phycol 32, 1581-1596 – adapted for CCAP

Reviewed: 19<sup>th</sup> August 2025