Appendix

Composition of NGM media (1L)
NaCl (3g)
Agar (17g)
Peptone (2.5g)
Mix above with 975ml water(H2O)
(autoclaved and cool to 60°C)
1 M KPO4 buffer pH 6.0 (25ml)
1 M CaCl2 (1ml)
1M MgSO4 (1ml)
5 mg/ml cholesterol in ethanol (1ml)

1 M KPO4 buffer pH 6.0 (1L)
KH2PO4 (108.3 g),
K2HPO4 (35.6 g)
H2O (to1L)

Composition of M9 Buffer (1L)
KH2PO4 (3 g)
Na2HPO4 (6 g)
NaCl (5 g)
1 M MgSO4 (1ml)
Distilled H2O (to1 L)
Sterilized by autoclaving

Composition of OP50 growth media (1L)
Bacto-trypolone (10g)
Bacto-yeast (5g)
Nacl (5g)
Distilled H2O (to1 L)
Autoclave followed by inoculation with E. coli OP50 single colony and incubation at 37°C. Allow to grow overnight.
Spot liquid culture on NGM plates and allow the culture to grow overnight at room temperature.

Composition of Freeze solution (1L) for C.elegans
NaCl (5.85g)
KH2PO4 (6.8 g)
Glycerol (300 g)
1M NaOH (5.6 ml)
H2O (make-up to 1L)
Autoclaved above mix
0.1 M MgSO4 (3ml)

Composition of bleach
5% sodium hypochlorite
1M NaOH
Mixed above solution in 1:1

S Basal (1L)
5.85 g NaCl,
1 g K2 HPO4,
6 g KH2PO4,
1 ml cholesterol (5 mg/ml in ethanol),
H2O to 1 litre. (Sterilized by autoclaving)

1 M Potassium citrate pH 6.0
20 g citric acid monohydrate,
293.5 g tri-potassium citrate monohydrate,
H2O to 1 litre. (Sterilize by autoclaving)

Trace metals solution
1.86 g disodium EDTA,
0.69 g FeSO4 •7 H2O,
0.2 g MnCl2•4 H2O,
0.29 g ZnSO4 •7 H2O,
0.025 g CuSO4 •5 H2O,
H2O to 1 litre. (Sterilize by autoclaving and Store in the dark.]
1 M CaCl$_2$
55.5 g CaCl$_2$ in 1 litre H$_2$O (Sterilize by autoclaving.)

S Medium
1 litre S Basal,
10 ml 1 M potassium citrate pH 6,
10 ml trace metals solution,
3 ml 1 M CaCl$_2$,
3 ml 1 M MgSO$_4$ (do not autoclave)

4% paraformaldehyde:
Paraformadehyde (4 g)
H$_2$O (50 ml)
Keep at 60°C.
1M NaOH (to help dissolve PFA)
Solution cooled to room temp

0.2M Na/K PO$_4$ pH 7.2
8.06 g KH$_2$PO$_4$,
37.75g Na$_2$HPO$_4$·7H$_2$O in 100ml H$_2$O)
(50ml)
Filtered and cooled to 4°C

10x PBS:
80 g NaCl
2 g KCl
14.4 g Na$_2$HPO$_4$·7H$_2$O
2.4 g KH$_2$PO$_4$ pH 7.4
fill to 1 liter.

BouinÕs:
75 ml saturated picric acid
25 ml formalin
5 ml glacial acetic acid

50x Borate buffer:
1 M H$_3$BO$_3$
0.5 M NaOH
(pH should be ~9.5 after NaOH addition)