## · Vibrio BHI broth medium

growth assay in liquid medium experiment p150 Primrose (ATCC recommends nutrient broth/agar + 1.5% NaCl ≈ 0.257 M):

Brain-heart infusion (BHI) solid

37 g/L

NaCl

20 g/L (Cf = 2%,  $\approx 0.342$  M)

pH 7.5 (consider 7.8-8.2?)

For use in pour plates use 1.5 % (w/v) ionagar

\*some of the BHI solid we've purchased already has 0.5% w/v NaCl when diluted according to the directions. THEREFORE, NEED TO ADD 15 g/L MORE NaCl when using them (we've routinely used 2 % NaCl in BHI broth culture medium).

(NOT USED) Nutrient broth (add NaCl 1.5-2% for Vibriol E. coli)

(p8 Ball):

\*\*We purchase NB solid that contains beef/peptone- need to add NaCl as desired (we've used 1.5 % in broth/plates)

- 1. 3 g beef extract, 5 g peptone, 15 g NaCl (Cf = 1.5 %), 500mL distilled water
- 2. Gently heat (stir) until dissolved (will be colored).
- 3. Bring the volume to just under 1L with distilled water.
- 4. Adjust the pH to 7.0 using 0.1N NaOH or 0.1M HCl as needed, q/c to 1L. Autoclave.

## Nutrient Agar plates (E. coli too)

Prepare exactly like nutrient broth BUT in step 1 add 15g of Agar (Cf= 1.5% w/v)

o For inoculating agar plates, want 1-5 x 10<sup>3</sup> cells/mL spread in 0.2 mL

## LB (Luria Bertani) Broth:

From scratch: 1% peptone, 0.5% yeast extract, and 1% NaCl. (NaCl 10 g/L, Peptone 10 g/L, Yeast extract 5 g/L) LB broth suggested to be pH 7-7.2 (adjust with 1N NaOH). Add Bacterial agarose for 10g/L agar (1%).

Lennox Broth/Miller Broth solid: 15g/L, add 10g/L agar for (1%) agar

\*\*Originally, we purchased LB low-salt solid (e.g. **Lennox, NaCl Cf 0.5** %) that contains peptone/yeast/NaCl and everything grew OK. Subsequently, we switched to 'regular' salt LB (e.g. **Miller, NaCl Cf 1** %) for most experiments (see lab trials for swarm assay showing no differenceà AY13-14 we used LB Lennox for swarms & worked well)