

**Table 1.** Comparative results of phosphate buffer values. Threshold and optimal concentrations (pH = 7, T = 37°C, W = 250 rpm)

| Parameters                                  | 10 mmol/L | 30 mmol/L | 50 mmol/L |
|---|-----------|-----------|-----------|
| Productivity (mg)                           | 120       | 390       | 70        |
| Biomass (g)                                 | 0.83      | 1.03      | 0.64      |
| N/C (%)                                     | 20.15     | 20.85     | 67.33     |
| Substrate Concentration (mg/L)              | 20.12     | 250.06    | 4688.37   |
| Temperature medium after sterilization (°C) | T = 72.8  | T = 64.9  | T = 70.2  |
| Conductivity (mS/cm) initial                | 18.60     | 16.60     | 22.30     |
| Conductivity (mS/cm) first measure (3h)     | 15.10     | 11.20     | 20.30     |
| Conductivity (mS/cm) final                  | 15.10     | 12.30     | 20.00     |
| Emulsification index Phase (1)              | 47.85     | 46.66     | 52.38     |
| EI <sub>24</sub> (%) Phase (2)              | 57.23     | 71.79     | 38.09     |
| Emulsification index Phase (1)              | 89.38     | 81.63     | 81.80     |
| ES <sub>5D</sub> (%) Phase (2)              | 81.46     | 96.17     | 18.74     |