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| **Name of Material/ Equipment** | **Role in the culture media** |
| Ferric citrate, ferric quinate, iron chloride or iron sulfate  | Iron source for the biomineralization process  |
| Vitamin supplement solution | Components of this solution can be used by the bacteria as coenzymes or as functional groups for certain enzymes |
| Trace mineral solution | Contains cofactors for enzymes |
| K2HPO4, KH2PO4  | Sources of phosphorus and potassium also acting as buffering agents |
| MgSO4.7 H2O | Source of magnesium and sulfate. Mg2+ can be used as cofactor for enzymes involved in cell division. Sulfate is important for synthesis of polysaccharides in Gram-negative bacteria and can act as an electron acceptor agent in anaerobic conditions. |
| HEPES | Organic buffering agent used to maintain the physiological pH in the cell during the changes of pH in the medium for cellular respiration.  |
| NaNO3 | Nitrogen source for synthesis of aminoacids via nitrate and nitrite reductase  |
| NH4Cl | Nitrogen source for synthesis of aminoacids |
| Yeast Extract | Source of amino acids and salts used for protein production |
| Peptone | Source of amino acids and salts used for protein production |
| Potassium L-lactate solution (60%) | Carbon source for heterotrophic metabolism |
| Sodium succinate hexahydrate | Carbon source for heterotrophic metabolism |
| Sodium L-tartrate dibasic dihydrate | Carbon source for heterotrophic metabolism |
| Sodium acetate trihydrate | Carbon source for heterotrophic metabolism |
| Sodium bicarbonate | Carbon source for autotrophic metabolism |
| Resazurin | Redox indicator  |
| Ascorbic acid | Reducing agent |
| L-cysteine.HCl.H2O | Reducing agent |
| Agar |  |