

Materials List for:

A Novel Bioreactor for High Density Cultivation of Diverse Microbial Communities

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Materials

Name	Company	Catalog Number	Comments
Aeration stone	Alita	AS-3015C	
Aerator	Top Fin	Air-1000	
Ammonium chloride	Sigma Aldrich	A9434	
Anion analysis column	Shodex	IC SI-52 4E	
Beaker (600 ml)	Corning Pyrex	1000-600	Used as mixing vessel (MV). Addition of hose barbs at the bottom and 500 ml levels. Outside diameter of hose barbs 3/8".
Calcium chloride	Sigma Aldrich	C5670	
Cation analysis column	Shodex	IC YS-50	
Cobalt chloride hexahydrate	Sigma Aldrich	C8661	
Copper chloride	Sigma Aldrich	222011	
Ferric chloride	Sigma Aldrich	157740	
Filter (vacuum)	Fisherbrand	09-719-2E	0.45 µm membrane filter, MCE, 47 mm diameter
Graduated cylinder (1,000 ml)	Corning Pyrex	3025-1L	Used as reactor vessel (R). Addition of hose barbs at bottom, 500 ml, and 1 L levels. Outside diameter of hose barbs 3/8".
HPLC/IC	Shimadzu	Prominence	
Magnesium sulfate	Sigma Aldrich	M2643	
Masterflex L/S variable speed drive	Masterflex	07553-50	Drive for recycle and feed pumps (2 needed)
Nickel chloride hexahydrate	Sigma Aldrich	N6136	
Potassium nitrate	Sigma Aldrich	P8291	
(Monobasic) Potassium phosphate	Sigma Aldrich	P5655	
Pump head	Masterflex	07018-20	Recycle pump head
Pump head	Masterflex	07013-20	Feed pump head
Pump tubing	Masterflex	6404-18	Recycle pump tubing
Pump tubing	Masterflex	6404-13	Feed pump tubing
Sodium bicarbonate	Sigma Aldrich	S5761	
Zinc sulfate heptahydrate	Sigma Aldrich	Z0251	