

Materials List for:

Electrochemically and Bioelectrochemically Induced Ammonium Recovery

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Materials

Name	Company	Catalog Number	Comments
Carbon Felt 3.18 mm Thick	Alfa Aesar	ALFA43199	Used as bioanode, 110 mm x 110 mm
Ti electrode coated with Ir MMO	Magneto Special Anodes (The Netherlands)		Used as stable anode for electrochemical tests
Stainless steel mesh	Solana (Belgium)	RVS 554/64: material AISI 316L, mesh width: 564 micron, wire thickness: 140 micron, mesh number: 36,6	Used as cathode, 110 mm x 110 mm
Stainless steel plate	Solana (Belgium)	inox 304 sheet, thickness: 0.5 mm	Used as current collector for the bioanode
Ag/AgCl Reference Electrode	Bio-Logic (France)	A-012167 RE-1B	
Potentiostat (VSP Multipotentiostat)	Bio-Logic (France)		
EC Lab	Bio-Logic (France)		software for performing electrochemistry measurements
Cation Exchange Membrane	Membranes International (USA)	Ultrex CMI-7000	Pretreated according to the manufacturers' instructions
Turbulence Promotor mesh	ElectroCell Europe A/S (Tarm, Denmark)	EPC20432-PP-2	spacer material, 110 mm x 110 mm
Connectors	Serto	1,281,161,120	Other sizes possible, dependant on tubing type and size of holes in frames
Strip and absorption column			In house design
Tubing	Masterflex	HV-06404-16	
Gas bag	Keika Ventures		Kynar gas bag with Roberts valve
Rashig Rings	Glasatelier Saillart (Belgium)	Raschig rings 4 x 4 mm	Put inside the strip and absorption column to improve the air/liquid contact. Available with many suppliers
Rubber sheet			Cut to fit on the perspex frames
Perspex reactor frames	Vlaeminck, Beernem		In-house design, see tab "reactor frames" in this file