

Materials List for:

Methods for Facilitating Microbial Growth on Pulp Mill Waste Streams and Characterization of the Biodegradation Potential of Cultured Microbes

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Materials

Name	Company	Catalog Number	Comments
1,4-Dioxane (Certified ACS)	Fisher	D111	Flammable, preoxidizable chemical
Black Liquor	Department of Forest Biomaterials at North Carolina State University	N/A	pH 12.72, 13.67% solids
Ethanol (microbiology grade)	Fisher	BP2818	
Ethyl Acetate (ACS reagent grade)	EMD	EX0240-9	Flammable
Glacial acetic acid (Certified ACS)	EMD	AX0073	Corrosive
Guaiacol	Sigma Aldrich	PHR1136	Harmful by ingestion, corrosive
HP-5 capillary column	Agilent	19091J-577	60 m x 0.18 mm internal diameter, 0.18 µm thickness
Hydrochloric acid (certified ACS)	EMD	HX0603P	
N,O-Bis(trimethylsilyl)trifluoroacetamide with trimethylchlorosilane 99:1% (BSTFA)	Fluka	15238	Flammable, causes skin burns and eye damage with contact
Na ₂ SO ₄ (FCC grade)	VWR	BDH8026	
NaClO ₂ (80%)	Sigma Aldrich	244155	Flammable, toxic
NaOH (certified ACS)	EMD	1.06498.1000	Corrosive
Alkacid pH test ribbons	Fisher	A979	
Phosphoric Acid (certified ACS)	Fisher	A242	
Polaris Q mass spectrometer	Thermo Electron Corporation		
Pyridine (99%)	Alfa Aesar	A12005	Flammable, toxic in contact with skin
Switchgrass	Cherry Research Farm Goldsboro, NC	N/A	Harvested August 2011
Thermo Finnigan trace gas chromatograph	Thermo Electron Corporation		
Whatman no. 1 filter paper	Whatman	1001-150	