

Materials List for:

Determination of Carbonyl Functional Groups in Bio-oils by Potentiometric Titration: The Faix Method

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Materials

Name	Company	Catalog Number	Comments
Analytical balance			accurate to 0.1 mg
dry block heater with magnetic stirrer, or hot water bath with magnetic stirrer			
Automatic titrator			We used a Metrohm Titrando 809 automatic titrator, though other equivalent systems are acceptable
Deionized water			
Ethanol (reagent grade)			CAS # 64-17-5
Hydroxylamine hydrochloride			CAS # 5470-11-1
Triethanolamine			CAS #102-71-6
Hydrochloric acid (37%)			CAS # 7647-01-0
Sodium Carbonate (primary standard)	SigmaAldrich	223484	
4-(benzyloxy)benzaldehyde			CAS # 4397-53-9
Dimethyl sulfoxide			CAS # 67-68-5
5 mL glass Reacti-vials with solid lid and teflon spinvane	Thermoscientific	TS-13223	
200 mL volumetric flask			
Volumetric or mechanical pipettes			