Record Nr. UNINA9910696520703321 **Titolo** Determination of sugars, byproducts, and degradation products in liquid fraction process samples [[electronic resource]]: laboratory analytical procedure (LAP): issue date, 12/08/2006 / / A. Sluiter ... [and others] Pubbl/distr/stampa Golden, Colo.:,: National Renewable Energy Laboratory,, [2008] Descrizione fisica 11 pages: digital, PDF file Collana Technical report;; NREL/TP-510-42623 Altri autori (Persone) SluiterA Soggetti **Biomass** Biomass conversion Sugar - Inversion Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from title screen (viewed on May 9, 2008). "January 2008." Sommario/riassunto Carbohydrates make up a major portion of biomass samples. These carbohydrates are polysaccharides constructed primarily of glucose, xylose, arabinose, galactose, and mannose monomeric subunits. During certain pretreatments of biomass, a portion of these polysaccharides are hydrolyzed and soluble sugars are released into the liquid stream. This method is used to quantify the total amount of soluble carbohydrates released into solution as well as the amount of monomeric sugars released into solution. The soluble sugars in the liquid fraction of process samples can be quantified by HPLC with refractive index detection. If the sugars are present in oligomeric form further processing into their monomeric units is required prior to HPLC analysis.