

Supplementary files

Online Resource 1

Chemical composition and mass balance of native and SIL treated as well as the bleached woody material obtained after treatment of birch with the SIL. The reference material is included *, **.

Source	Cellulose wt-% (g)	Hemicellulose wt-% (g)	Lignin wt-% (g)	Total wt-% (g)
Native birch	42 (12.6)	32 (9.6)	22 (6.6)	96 (28.8)
DBUMEASO ₂ SIL treated birch chip	75 (22.5)	20 (6.0)	5 (1.4)	100 (29.9)
DBUMEASO ₂ SIL treated birch chip bleached	83 (24.8)	13 (4.0)	2 (0.5)	98 (29.3)
Reference	70 (0.7)	21 (0.2)	5 (0.1)	96 (1.0)

* The amount in parenthesis corresponds to the amount of the undissolved wood material. The inability to close the initial mass balance is obvious; the ash elements and the wood extractives are not considered in the calculation. Furthermore, the deviations for the values presented are $\sim\pm 4$ wt-%.

**The values in parentheses represent the amount of each component recovered from the 50 g total wood minus weight loss from the treatment. The values presented for the reference are for 1 gram of sample.