



**Title:** Determination of the ash content and fibre fraction in Envirodeck HB cedar

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Entries: Ash content, fibre fraction, Envirodeck HB cedar, HDPE,



### 3. Results

The moisture content and ash content of the WPC, the HDPE and the fibres are assembled in table 1. The analysis results of the element analysis of the ash are assembled in the appendix. The table shows that calcium appears in relative high concentration. Calcium (chalk) is often added to WPC material. Also iron and titan, which are known components from pigments, appear in relative high concentration.

The fraction fibres and undissolved parts in WPC, in the fibres and in the HDPE basic material are assembled in table 2. Based on the calculations of the data in tabel 2 and corrected for the undissolved parts in the HDPE, the fibre fraction found in the WPC is **55,8%**.

**Table 1.** Moisture content and ash content

Code / description	Moisture content	Ash content
Envirodeck HB cedar	3,9%	6,2%
HDPE	0,2%	-
Fibres	11,1%	-

**Table 2.** Fibre fraction / part undissolved parts.

Description	Weighed samples [g]	Profit fibres and undissolved parts [g]	Profit HDPE [g]	Total profit [g]	Fraction fibres and undissolved parts		Mass balance
					Per determination	Average	
WPC cedar	0,988	0,523	0,451	0,973	52,9%	60,3%	99,5%
	0,922	0,588	0,337	0,925	63,7%		
	1,084	0,696	0,386	1,082	64,2%		
HDPE	1,266	0,078	1,189	1,267	6,2%	4,4%	99,3%
	2,019	0,055	1,933	1,988	2,7%		
Fibres	0,902	0,861	0,011	0,872	95,4%	95,4%	96,6%