

Probo
Fortuinweg 17
9101 PE DOKKUM
Netherlands

Your notice of
12-12-2022

Your reference

Date
13-01-2023

Analysis Report 22.06676.01

Required tests :

EN 12149 - test C (1997)

**Determination of formaldehyde in wallcoverings in roll form _
(WKI method)**

EN 12149 - test B (1997)

**Determination of vinylchloride in wallcovering in roll form
(GC-MS)**

EN 12149 - test A (1997)

Determination of heavy metals in wallcoverings in roll

Sample id	Information given by the client	Date of receipt
T2224867	Sign again material	12-12-2022



Kristina De Temmerman
Order responsible

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The results of the analysis cover the received samples. Centexbel is not responsible for the representativeness of the samples.
In assessing compliance with the specifications, we did not take into account the uncertainty on the test results.

Reference: T2224867 - Sign again material

Determination of formaldehyde in wallcoverings in roll form (WKI method)

Date of ending the test 11-01-2023
Standard used EN 12149 - test C (1997)
Product standard EN 15102 (2007) +A1 (2011)

Deviation from the standard -

Principle Absorption of the released formaldehyde in water of textile wall covering.
Conditions: 2 * 24 hours at 40°C in a closed bottle. Measurements take place on the 2nd 24 hours absorption liquid.
Reaction with acetyl acetone
Determination Spectrophotometric at 412 nm

Results

Limit value: 120 mg/kg
Reporting limit: 0.50 mg/kg

mg/kg
< 0.50

Reference: T2224867 - Sign again material

Determination of vinylchloride in wallcovering in roll form (GC-MS)

Date of ending the test 22-12-2022
Standard used EN 12149 - test B (1997)
Product standard EN 15102 (2007) +A1 (2011)

Deviation from the standard -
Extraction method Dimethylacetamide is added to the sample in a closed bottle. The closed bottle is heated during 2 hours at 60°C. Air from the headspace is injected directly on GC.

Analysis method Gas chromatography, external standard

Results
Detection limit 0.2 mg/kg

Result (mg/kg)	< 0.20
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Reference: T2224867 - Sign again material

Determination of heavy metals in wallcoverings in roll

Date of ending the test 10-01-2023
Standard used EN 12149 - test A (1997)
Product standard EN 15102 (2007) +A1 (2011)

Deviation from the standard -
Extraction method With a solution of 0.07 mol/L HCl
Determination ICP-OES
Analytical correction according to EN 233 (wallpaper cylindrical-specifications)

Results

Metals	Reporting limit mg/kg	Concentration mg/kg	Corrected concentration (mg/kg)	Maximum migration * mg/kg
Sb (antimony)	2	19.43	7.8	
As (arsenic)	2	< 2.00	< 2.0	25
Ba (barium)	2	67.32	47	500
Cd (cadmium)	2	< 2.00	< 2.0	25
Cr (chromium)	2	< 2.00	< 2.0	60
Pb (lead)	2	< 2.00	< 2.0	90
Hg (mercury)	1	< 1.00	< 1.0	20
Se (selenium)	2	< 2.00	< 2.0	165

* Limiting maximum migration according to EN 15102 (2007)+A1 (2011)