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Replaces

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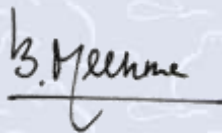
## Stone Paper

STATEMENT BY KIWA

Kiwa declares that legitimate confidence exists that the product Stone Paper supplied by

### Gaia-concept BV

complies with the data laid down in this Kiwa Covenant



Bouke Meekma  
Kiwa

Publication of the Covenant is allowed.

Advice: consult [www.kiwa.nl](http://www.kiwa.nl) in order to ensure that this Covenant is still valid.

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## Stone Paper

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### Introduction

The subject of this Kiwa Covenant is a product made of 80 % CaCO<sub>3</sub> tied-up with PE-HD and covered with a coating. The product is commercialised as Stone Paper.

The producer is Lung Meng Technology (TLM) located in Taiwan and is imported by Gaia Concepts B.V. in the Netherlands

This Kiwa Covenant covers the statements of the producer about:

- the safety in use,
  - the content of dangerous / hazardous substances.
- its CO<sub>2</sub> footprint,
- energy and water consumption.

Where possible a comparison is made with typical values of existing products.

Kiwa has verified and analysed the data supplied by Gaia Concepts B.V. and declares that legitimate confidence exists that the product Stone Paper complies with the data laid down in this Kiwa Covenant.

Due to its contribution to a circular economy Kiwa granted its special logo, Kiwa Castor Gaea, to this product

### Production process description:

Stone Paper is produced in a calendering process where the product is molten and shaped into the end product from a premix of CaCO<sub>3</sub> and PE-HD and finally coated.

The CaCO<sub>3</sub> is gathered as a waste material from quarries nearby TLM's plant, for PE-HD a recycled version is used.

The properties of Stone paper are amongst others good tensile strength, tear resistance and water repellent. Furthermore Stone Paper is free from wood elements, is water repellent and free from acids. For its physical properties reference is made to data sheets.

The producer of Stone Paper is ISO 14001 certified.

### Carbon footprint:

The cradle to gate carbon footprint, as a partial carbon footprint<sup>1</sup> of a product, is reported by Mr Dennis Hol<sup>2</sup>. The report states an emission of 474 kg CO<sub>2</sub> per ton Stone Paper and for pulp paper as a reference a typical value of 1431 kg CO<sub>2</sub> per ton is quoted.

### Dangerous / hazardous substances

Stone Paper is free from dangerous / hazardous substances. On the product an analyses has been performed on 161 SVHC<sup>3</sup> chemicals listed according to the European ECHA<sup>4</sup> by an independent test laboratory. Measured concentrations were ≤ 0,1 w/w in the tested samples.

### Energy and water consumption to produce Stone Paper

In the table energy and water consumption

	Stone paper	Recycled pulp Paper <sup>5</sup>	Pulp Paper <sup>6</sup>
Energy GJ	3,1	18,9	20,4
Water consumption m <sup>3</sup>	0,1	22,1	59,3

<sup>1</sup> Reference definition according ISO/TS 14067

<sup>2</sup> D. Hol report "Stone Paper S-Eco (RP) Sustainability Analyses". 2013-12-17

<sup>3</sup> Substances of Very High Concern

<sup>4</sup> European Chemicals Agency

<sup>5</sup> Typical values

<sup>6</sup> Typical values

## Stone Paper

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### **Specific properties**

The mechanical properties of Stone Paper are not a subject of this report, the data can be found in the relevant data sheets.

Inherently to the production process it can be stated that Stone Paper is:

- acid free,
- water repellent, and
- without traces of wood.

### **Recyclability**

Stone Paper is recyclable as a “highly filled” plastic in different plastic processes.

### **Kiwa Castor Gaea**

Kiwa Castor Gaea is Kiwa’s recognition for those products that contribute to the development of a circular economy in which resource efficiency is achieved and accelerated through the use of non-hazardous waste products of other supply chains, with reduced levels of energy and waste water and also a reduction in the CO<sub>2</sub> footprint is achieved.

### **The use of Kiwa Castor Gaea**

The use of the logo of Kiwa Castor Gaea is permitted and is subject to Kiwa’s rules and regulations for this particular logo.