



## OVERVIEW:

- 5 times lighter than a glass bottle
- Outer is made from recycled cardboard and is recyclable
- The inside pouch is made with 77% less plastic than a plastic bottle •Carbon footprint up to 6 times lower than a glass bottle

An independent Life Cycle Analysis carried out by Intertek which tested the Interpunkt Cardboard bottle alongside bottles made from glass and PET plastic, found:

- The Cardboard bottle has the lowest carbon footprint with 91.9g CO<sub>2</sub>e - 84% lower than a 440g imported glass bottle (558.2g CO<sub>2</sub>e) and 34% lower than a bottle made from 100% recycled plastic (138.6 g CO<sub>2</sub>e)
- The Cardboard bottle's carbon footprint was even four times less than a 345g lightweight glass bottle made in the UK (382g CO<sub>2</sub>e)
- The Cardboard bottle uses up to 77% less plastic than a plastic bottle. Only 15 grams against a 64g wine bottle made from 100% recycled plastic
- The Cardboard bottle's water footprint is at least four times lower than a glass bottle. It takes 2.5 litres of water to make a lightweight 345g glass bottle made in the UK but only 0.6 litres to make the cardboard bottle

The LCA looked at the 'cradle to grave' life cycle of all bottles, including mineral extraction, manufacture, transportation, distribution, filling and recycling or incineration.

The internal pouch is recyclable and full certification is achieved. It depends on where in the world the pouch will be disposed of as to if it will be recycled.

The bottle is already made from recycled paper and PET/HDPE plastic which can be recycled. The Bottle is designed to easily recycle and easily separate, and the consumer puts the paper into the paper recycling and the pouch into the plastic recycling where available. If the consumer puts the whole Bottle into the paper waste stream, then the Frugal bottle will break down in the pulping process and the liner will detach easily and will be removed with the other inclusions in the process. This again can be collected and recycled if an infrastructure exists.

In the UK only 4% of any plastic film is recycled (plastic bags, cling film, lidding films etc) and so 96% of these products including the internal pouch will most likely go to energy from waste. This will change over the coming years as the government's waste strategy comes into effect taxing plastics with less than 30% recycled content. In turn, this will drive the value of recycling films up and so greater recycling in the UK. Other markets, Germany, Scandinavia, and Singapore all have high film recycling rates already.

We have focused on reducing carbon in consumer packaging as carbon is having the biggest impact on the environment. As stated above the Bottle has a carbon footprint up to six times (84%) lower than a glass bottle and more than a third less than a bottle made from 100% recycled plastic. The Bottle's water footprint is also at least four times lower than glass. These figures are based on a UK independent Life Cycle Analysis and assumed the pouch would not be recycled.

## THE BOTTLE



**Material:** Varel- Jadeboard Duo Recycled paperboard with 6% virgin content.

**Pack weight %:** 84%

**Recycling stream:** Mixed paper recycling

**Testing:** We have conducted trials with both Intertek and Test Tech in the UK to simulate real world re-pulping. The vast majority of our bottle had completely dispersed within a 20 minute commercial batch re-pulping time and 90.5% of fibres were recoverable.

*Note this report is available under NDA*



**Pouch material:** Polypropylene

**Pack weight %:** 16%

**Recycling:** The pouch can be recycled, it could go to incineration in certain countries until selection systems improve.

This liner is entirely PP with the exception of trace amounts of aluminium used in the barrier- oriented PP film. This small amount as explained by multiple film suppliers and plastic film recyclers is an acceptable contaminate in recycling, and they believe this does not impede

recyclability in both PP streams or with mixed polyolefins.

## HOW TO RECYCLE THE INTERPUNKT BOTTLE:

Once the consumer has finished with the Interpunkt Bottle, the food grade pouch is easily removed and the paperboard is placed into the paper/cardboard recycling. In some countries, the liner may go in the general waste however in many other countries this will be recycled with mixed plastics.

### SUMMARY:

It's lighter. The Cardboard bottle weighs just 83g so it is up to five times lighter than a normal glass bottle, making it easier to carry and lighter to transport.

It's better for the environment. An independent Life Cycle Analysis by Intertek found the Cardboard bottle, which is made from recycled paperboard with no chemicals, has a carbon footprint up to six times (84%) lower than a glass bottle and more than a third less than a bottle made from 100% recycled plastic. The Cardboard Bottle's water footprint is also at least four times lower than glass.

It's easy to recycle again. Simply separate the plastic food-grade liner from the paper bottle and put them in your respective recycling bins. Or you can put the whole bottle in your paper recycling bin and the liner will be easily separated in the paper re-pulping process.

It uses less plastic than a plastic bottle. The Bottle uses up to 77% less plastic. Only 15g compared to a 64g bottle made from 100% recycled plastic.

It stands out. As the Bottle is made from recycled paperboard, it allows for 360-degree branding across the bottle. No other wine or spirits bottle looks or feels like it, so it stands out on shelf and table.