



## Creative competition 2019

*Design your future: future challenge glass. It's in your hands!*

### Information on glass as a packaging material

#### Glass

There is no other packaging material that shares the outstanding properties of glass. Glass is a natural and neutral material that perfectly protects high quality beverages and foodstuffs.

#### Health

Glass is a pure material. It does not react with other substances and can be safely reused. Glass is inert; this means that products are not influenced in any way when they come into contact with glass. Nothing is transferred from glass into the product; glass prevents anything from outside penetrating into the product and also ensures that nothing escapes from inside into the environment. Glass is the healthiest form of packaging there is - it acts like a bank vault to protect its valuable contents and keep them safe over the long term. Glass is also particularly 'ocean-friendly'; this unique packaging material does not release microplastics into our food chain and contributes to the protection of our rivers and seas.

#### Glass recycling

The collection of used glass containers is an important way of protecting our environment and climate. Glass is the only packaging material that can be 100% recycled. Glass articles can be melted down again and again without any deterioration in quality. The reuse of scrap glass helps preserve resources, saves energy, reduces CO<sub>2</sub> emissions and provides for a closed-loop material cycle.

#### Aesthetic and high quality

Glass has an almost unlimited potential when it comes to how it can be modelled, so that its design, form, colour and additional decorations make the product it contains exceptional and distinctive. Not only that, but the use of glass as a container material emphasises the value of its contents. We as consumers are attracted by the way that glass can be of various colours, can be elegantly formed and is pleasant to the touch. Humans have been using glass containers for thousands of years. Glass is an appealing material and our senses can appreciate its quality characteristics.

#### Natural material

What is glass made of? Glass is made of completely natural substances: the basic raw materials are silica sand, limestone, dolomite and soda ash; these are melted together with collected scrap glass in furnaces at a temperature of roughly 1600°C and formed into new glass containers. The more scrap glass that is collected and can be used to produce new glass containers, the less basic raw materials will be required by the glass industry.