

## SUSCEPTOR INK

**DESCRIPTION OF THE INVENTION**

At ITENE we have developed a new susceptor ink that changes the current microwaveable packaging concept.

Many microwaveable packages currently use susceptors in the shape of metallized plastic films, in order to enhance heating and browning of packaged foods. However, these susceptors make recycling of the packaging more difficult, given that the packages contain an additional metallized plastic sheet.

We have developed an **ink that enhances heating and browning of packaged food**, in the same manner as conventional susceptors, **while overcoming the disadvantages of conventional susceptors**.

In comparison with traditional susceptors – made of metallized polyester films typically laminated to paperboard or in multilayer film structures, our susceptor is **an ink that can be applied by conventional printing methods**. It therefore simplifies the packaging production process.

Furthermore, our susceptor ink allows for a **more environmentally -friendly solution** compared to the traditional susceptors that unavoidably have a plastic layer, allowing an easier recyclability of the package containing the susceptor ink.

In the following link, the invention is explained in a visual manner:

[https://www.youtube.com/watch?v=\\_QZ8YTYFEYw](https://www.youtube.com/watch?v=_QZ8YTYFEYw)

**APPLICATION BUSINESS SECTORS**

This susceptor ink can be applied to many types of packages, being the most usual and validated applications for paper and board packages:

- Popcorn microwaveable bags
- Crisping sleeves for bakery products and sandwiches
- Pizza trays
- Other microwavable food packages

Moreover, ITENE is currently researching new applications for this ink, for new kinds of substrates and microwaveable packages

**TECHNICAL ADVANTAGES AND BUSINESS BENEFITS**

In comparison with traditional susceptors – made of metallized polyester films typically laminated to paperboard or in multilayer film structures, our susceptor



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presents the following technical advantages:

- MORE ENVIRONMENTALLY-FRIENDLY SOLUTION. The new susceptor ink makes the package more recyclable compared to the traditional susceptors that unavoidably have a polyester plastic layer.
- VERSATILITY OF THE APPLICATION PROCESS. The new susceptor **ink can be applied by conventional printing methods**, which allows printing in many sizes, shapes and designs. This simplifies the package manufacturing process.

### STATUS DEVELOPED OF THE TECHNOLOGY

This technology has been validated at laboratory scale, pilot scale (semi-industrial) and industrial scale

### INTELLECTUAL PROPERTY RIGHTS

The susceptor composition, the resulting ink, and the packages containing such susceptor ink have been protected by the following intellectual property rights:

- European patent application number EP17382265.1, with application and priority date 11/05/2017, entitled "Susceptor ink compositions for microwaveable packages".
- International patent application, with publication number WO/2018/206745, entitled "Susceptor ink compositions for microwaveable packages".

### COLLABORATION SOUGHT

We are looking for companies (ink producers, packaging manufacturers, companies which pack or sell microwaveable packaged foods) which are interested in this technology, in order to establish **licensing agreements** for the manufacture, use and commercialization of this technology.

### RELATED IMAGES



SUSCEPTOR INK

#### CONTACT DETAIL

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