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think^z approved by nature

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Concrete commitment for a new concept of sustainability

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ZANASI's commitment to developing sustainable solutions over time



1. European Green Deal: transforming environmental issues into opportunities

The Green Deal aims to bring member states' greenhouse gas emissions to zero by 2050 and to reduce them by 55 percent by 2030. The European Union's Sustainable Growth Strategy thus seeks to transform the climate emergency into opportunities for more equitable and inclusive economic and social development.

Therefore, products must be designed with a focus on their entire life cycle, including disposal. Consumers feel an increased collective responsibility; increasingly informed and aware of sustainability issues, they say the environmental impact of packaging influences their decisions.



In this context, the packaging industry must take a step forward in its approach to packaging, considering it not only as a purchase driver but as a new sales aspect with sustainable characteristics: **reusable**, **recyclable**, **and biodegradable in a short time**, **and that therefore with less environmental impact**.

The approach to sustainability is now no longer an option for companies but a real and indispensable necessity to consolidate and develop its "reputation" in the market.



2. The "approved by nature" thinkz project

Increasingly conscious choices toward environmental issues require increasingly green concrete actions. At ZANASI, strengthened by our experience gained in marking systems, we support companies committed to designing new sustainable packaging with **a new range of eco-friendly inks.**

Thinkz is an expression of renewed awareness of sustainability issues. It fully embraces the ZANASI philosophy that constantly drives us to ask new questions and persevere in finding solutions that promptly meet market demands.

Thinkz merges in a single word: "thinking", research and awareness of environmental issues, with the "ink" world that, by its type of formulation, is "approved by nature". All elevated to the higher level, where Z stands for ZANASI's concrete commitment to sustainability projects.



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3. Thinkz inks are eco-friendly

Our Research & Development Area team dedicated to ink design has formulated and designed the new sustainable inks of the **thinkz range that boast unique characteristics that are complementary and available in different environmentally friendly formulations.**

The ideal solution for marking sustainable packaging that meets ethicality and respect for nature expectations, with important strengths based on **raw materials, product certification, and high compliance standards.**



RAW MATERIALS - Our relentless commitment is reflected in the care and consistency with which we seek **raw materials with low environmental impact and from renewable sources.** Renewable sources inherently emit carbon dioxide in the same amount removed from the environment in their life cycle, boasting a nearly zero ecological impact.



VALIDATION AND CERTIFICATION - The product is constantly monitored, reworked, and refined to keep up to date with evolving regulations, ensuring that **inks are** validated and certified according to the regulatory standards of different applications and providing an always state-of-the-art and safe product.



HIGH CONFORMITY STANDARDS - Our ink design Research & Development Area team is committed to maintaining the **highest standards of compliance with the raw materials we use and** constantly trains to provide the market with detailed information on the substances used **to ensure maximum user safety.**

Thinkz: environmentally friendly coding inks



4. Biodegradable or compostable?

Biodegradable or compostable?

These two terms are often confused or used synonymously, but they have different meanings. The main difference between the two terms is in the **timing and type of transformation**. **Compostable waste is always biodegradable, while, on the contrary, a biodegradable material is not necessarily compostable** because it may not break down sufficiently during a composting cycle.

BIODEGRADABLE is a material that, thanks to bacteria and other natural agents, **can be decomposed into simpler substances** such as water, carbon dioxide, and methane. It is nonpolluting and should not be disposed in the organic bin, but rather in the **undifferentiated** waste. The European standard UNI EN 13432 states that a product can be labeled as biodegradable only if 90% of decomposition occurs within 6 months.

COMPOSTABLE is a material that is not only biodegradable but also **becomes compost, i.e., fertilizer**, a nutrient that can be used in agriculture **and should be disposed of in the wet part** of separate waste collection. The products - packaging especially - can only be definitively "compostable" if, in an industrial composting facility, are transformed within 3 months into compost.



BIODEGRADABLE 90% decomposition in less than **6 months**



COMPOSTABLE Disintegration In less than 3 months



Real support for partners who, like us, share sustainability goals



5. Packaging Compostabili

For packaging to be considered compostable, it must not only be composed of biodegradable material. Still, it **must obtain certification in industrial packaging compostability,** regulated by the European standard UNI EN 13432. Compostability is achieved **through 4 steps of technical evaluation**, focused on the absence of heavy metals in the product, reduced ecotoxicity, and the ability to disintegrate and degrade spontaneously.

DISINTEGRATION

Physical breaking of the product into small fragments

BIODEGRADATION

Chemical degradation of packaging and its components by microorganisms

ECOTOXICITY

Germination test of compost produced without toxicological effects

NO HEAVY MATERIALS

Checking for the presence of heavy materials and fluorine



6. OK compost! Sustainable inks certified for compostable packaging



Sustainable **thinkz** inks certified for compostable packaging have passed verification tests and **are TUV OK compost INDUSTRIAL certified.**

We thoroughly studied their development process, starting with carefully selecting materials free of heavy metals and with reduced ecotoxicity - this enabled them to pass lengthy validation tests and obtain OK Compost INDUSTRIAL certification from TUV Austria, per the requirements set by the **European Compostability Standard EN 13432.**

Thinkz inks have passed the same tests as compostable packaging!



OK COMPOST CERTIFIED

The ready-to-use ink guarantee for coding compostable packaging, do not require in-application assessments, further testing or risk assessment by the client.



PRESERVES COMPOSTABILITY

OK compost certified inks that comply with GMP procedures for the food packaging industry and maintain compostability characteristics of the packaging.





7. Certified ink OK biobased product from renewable resource



The **OK biobased** certified ink, formulated with components derived from **renewable and organic sources**, is a **concrete contribution** to the growing sensibility of researching materials with low environmental impact.

Thanks to the careful selection of raw materials, OK biobased ink has been **certified by TUV Austria**, a high-quality guarantee of the **components'** renewability. The formulation of the ink is based on the consistent reduction of pollutants, and the use of renewable resources, which the environment quickly regenerates compatibly with their consumption, **aiming to reduce the environmental impact and release of CO2 into the atmosphere**.

The recognition of these characteristics is issued by the accredited laboratories of the TUV certifying body, which, using the **carbon 14 method, can** date materials of organic origin and, thus, from plants.

With a view to environmental friendliness, OK biobased ink has also obtained **OK compost INDUSTRIAL** certification, a further attestation confirming its characteristics as an environmentally friendly, safe, and compostable material.



OK BIOBASED CERTIFIED

OK biobased ink components come from renewable resources and help reduce carbon footprint.



OK COMPOST CERTIFIED

The ink retains the compostability characteristics of the packaging, which can be disposed of in the wet waste. "...economic growth will have to be decoupled from the use of fossil resources..."

8. How thinkz inks reduce environmental impact

At ZANASI, investment in R&D is geared to support, in a concrete way, the sustainability goals of the manufacturing and packaging industry by developing coding systems, software, and inks for marking products with features designed to reduce their production and environmental impact. This path includes **OK compost INDUSTRIAL-certified thinkz inks**, which **ensure that they maintain unchanged The compostability characteristics of the packaging**, which consequently can be disposed of in wet waste and certified **OK Biobased**

Thinkz inks are one of the steps in **our sustainability journey**, alongside the companies, to reduce environmental impact. For this last aspect, our project on **new cartridges** is critical.

Less Waste - Conscious Disposal



The breakthrough sustainable design allows us to use **50% less plastic*** to manufacture our cartridges for the same content. **Moreover, our cartridges are made from 100% recyclable plastic**, translating into less use of fossil fuels and **halving the environmental impact** of hazardous industrial waste during disposal.

*compared to ink containers on the market



With the thinkz family, the cartridge is no longer a hazardous waste!

The used cartridge to be disposed of will always be a special waste because it is industrial waste, but it is no longer hazardous, which means less expense in its disposal.





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