

Jokey Plastik Wipperfürth GmbH | Postfach 1268 | D-51676 Wipperfürth



JOKEY PLASTIK
WIPPERFÜRTH GMBH

August-Mittelsten-Scheid-Str. 23
D-51688 Wipperfürth

T +49 2267 685-0
F +49 2267 685-1133
M info@jokey.com
I jokey.com

Wipperfürth, 22.11.2018

Dear

Many thanks for your interest in the Jokey Ecological Concept.

We are glad to be able to show you how the Jokey Group as a leading manufacturer of plastic packaging materials for the filling industry exercise its responsibility with the regard to the subject of plastic packaging and the environment. In order to address this issue, however, plastic as a raw material must be considered in a much wider context.

Jokey has already been manufacturing plastic packaging for the filling industry for fifty years. Proximity to our customers, innovation and dynamic growth has made the family enterprise into a company that operates throughout the world. Today, the group has 15 factories in 12 countries and delivers to customers in about 80 countries.



The Jokey Ecology Concept

In developing our packaging, we emphasise maximum sustainability throughout the whole product cycle. We have for many years been developing packaging solutions that enable both us and our customers to combine commercial success with responsible behaviour towards both people and the environment. In order already to optimise the use of CO₂ at the planning stage, our experts together with our customers look for the most suitable raw material for the product. Jokey already describes the curriculum vitae of a package with the development order. Before a package is even

Rechtsform:
GmbH mit Sitz in Wipperfürth

Registergericht Köln
HRB 37720

Geschäftsführer:
Herbert Kemmerich (Vors.) | CEO
Jens Stadter
Ralf Kemmerich | COO
Peter Dörmach | CFO
Christof Kölschbach | CSO

manufactured, the new concept has been tested from all aspects: the product life cycle analysis. As part of this process, our developers analyse the implications for the environment of the package in all the phases of the product. From the manufacture of the raw material through all the stages of its processing in the Jokey manufacturing plant to the use and recycling of the final product.

Plastic packaging contains valuable raw materials

Jokey packaging is manufactured from polyolefins, chiefly polypropylene and to a limited extent from polyethylene. Polyolefins are excellently suited to re-use of the raw materials. 100% of our packaging materials can be recycled. Thus, the secondary raw materials are available for re-use in manufacturing, finite resources are conserved.

Jokey relies on a closed recycling system. This enables on the one hand, disposal of waste materials to be reduced and on the other the long life-span of the material to be used, which in turn also entails an extremely high storage capacity of the energy used. This makes high savings in CO₂ possible. With a comprehensive recycling system, the long expiry date of plastic represents a clear advantage for the environment.



1 Jokey initiative: grey is the new green

Resource efficiency through savings in materials

Thin-walled packaging consumes less raw materials and reduces the ecological footprint in logistics and transport. Since 1990, our developers have been able to reduce the charge weight by at least a third thanks to the Thin-Wall technology. Simultaneously, we have been able to fulfil our customers' demands for functionality, stability and user-friendliness. In order to meet our customers' needs, we produce packaging with the same geometric qualities in various weight categories. We have been able to steadily reduce the ecological footprint through a progressive reduction in the charge weight of the product.



The long life-span of plastic also has advantages

Plastic has a life-span of approximately 450 years. This is generally regarded as a disadvantage with regard to plastic waste. When used correctly however, this long life-span has definite advantages compared with alternative packaging materials: for example, Jokey packaging is frequently re-used as containers in private households and commercially after its original content has been consumed. This is because they are robust and can still be closed reliably. Even after years of secondary use, they can still be returned to the collection centres so that the material can be re-used.

New from old: recyclate packaging for non-foodstuffs

Jokey has been manufacturing packaging from recycled plastics (recyclate) for the non-food industry since the beginning of the 1990s. The post consumer secondary raw materials used in this process are derived from household collections. Our grey recyclate bucket has already been in use since since 1990. At that time, however, this packaging only found limited acceptance from customers. Since that time, we have repeatedly emphasised the topic in various campaigns. We are currently promoting recyclate packaging once more with the initiative "Grey is the new green". Paints, building materials, chemicals and other non-food products are just as well packed and secure in recyclate packaging as in new plastic materials. In addition to recyclates, we also recycle manufacturing waste, so-called regranulates, from our own manufacturing process. Since we began this process, we have consistently avoided manufacturing wastage.

Packaging from sustainable biomass

Jokey is always keen to identify new trends in plastics development and to advance innovation. For this reason, we have decided in favour of the optional use of bio-polymers – as an additional opportunity to use raw materials in an ecologically meaningful manner. Biopolymers refer to plastics that are based on renewable raw materials. A biopolymer share of up to 30% can already be processed in standard Jokey packaging. This alternative offers customers the opportunity to further improve their CO₂ balance and to help to accelerate the development of sustainable packaging. However, Jokey only recommends biopolymers made from biomass generated in a sustainable manner and with internationally recognised certification.

Plastic packaging scores in the global trading network

Today, companies, like consumers, must face global challenges such as diminishing resources, climate change and the rapid growth of the earth's population. Increasing global warming and ever increasing plastic waste in the earth's oceans have alarming consequences for nature and the human race. These challenges are increasingly dominating public discussion. It is also continued in our company. Nevertheless, whilst plastic increasingly acquires a negative image across-the-board, as a manufacturer of plastics, we ask ourselves the question:

What would the world be like without plastic?

More than 7.5 billion people on the earth want to be supplied with foodstuffs and non-food products. Every day, gigantic flows of goods have to find their way to the end-consumer throughout the world. Without suitable packaging, this would not be possible. In many ways, plastic packaging is superior to alternative packaging materials such as



paper, metal or glass: plastic packaging protects filled goods reliably from spoilage and damage as well as ensuring hygiene and quality. Without this protection, a large part of filled goods would be either spoiled or lost which would be an unnecessary wastage of resources. In the households of the the EU countries alone, 70 million tonnes of foodstuffs end up as rubbish every year. An

2 Plastic packaging is highly efficient and protects

example: according to a study carried out by the WWF, if a kilogramme of steak goes to waste, this uselessly affects the climate with 13 kilogrammes of CO₂ and wastes 15,000 litres of water. This was incurred in the production process and the same amount will be occurred when it is produced again. Lengthening the shelf-life through plastic packaging is therefore also particularly economical, conserves valuable resources and protects the climate.

Why the environment does not always benefit from a return to alternative packaging materials

In a comprehensive study, the Society for Market Research in Packaging already proved in 2004 that a packaging world in which plastic was largely excluded would entail an increase in the volume of packaging materials by approximately 53%.¹⁾

The current public discussion on a reduction in the consumption of plastic is unquestionably an important step in strengthening consciousness of how valuable resources are used. However, it is frequently overlooked in the search for alternatives that their ecological balance is not any better. A paper bag performs less well well in comparison to a plastic bag made of polyethylene with regard to the use of resources and energy. Although its climate balance is somewhat better than the plastic disposable bag because the latter uses fossil raw materials such as oil, the manufacture of the paper bag requires three times as much material.

Plastic packaging conserves more resources than it consumes by its manufacture

The EU has declared war on plastic waste in the sea with its prohibition of disposable products made of plastic, an increased recycling quota and the first Europe-wide strategy for plastics. Every year, Europeans generate 25 million tons of plastic waste but only less than one-third of this amount is collected for recycling. An increasing number of people regard the use of plastic packaging critically. Nor do we at Jokey close our eyes to the undoubted trend to excess packaging. In exchanging opinions with our stakeholders and the public, we observe time and again that packaging is today viewed increasingly from the point of view of sustainability. That is a highly positive development, nevertheless it is frequently overlooked that sustainability is based not only on ecological but also on economic and social aspects. Sustainable packaging means: economical, consumer-friendly and environmentally compatible packaging. Plastic packaging continues to perform particularly well in comparison with alternative packaging materials such as glass or paper. It is light and uses only limited raw materials in its manufacture. In Europe, plastic packaging accounts for only 1.5 per cent of the total consumption of oil and gas.



3 Processing post-consumer recyclates

Are packaging materials made from bio-plastics the future?

In the meantime, plastics made from renewable raw materials are enlarging the range of plastics. Films made of sugar or starch are most prevalent in packaging fruit and vegetables, but are also used in agriculture. However, the use of sources derived from plants can easily disguise the fact that bio-plastics made from sugar cane or maize can have a greater impact on the environment than plastics made from oil. This is because, firstly, sugar cane requires a lot more water and fertiliser and, secondly, enormous areas of tropical rain forest have to be felled for the plantations, something that ultimately threatens both the climate and biodiversity.

The influence of society

We are convinced that packaging responsibility can only succeed in a global concept and must embrace the whole of society. This is why we are in a continuous dialogue with a number of institutions throughout the value creation chain as well as important stakeholders. These include, for example, the Eco Design Round Table, environment committees of the Industrial Association for Plastic Packaging, customers, suppliers, the media, associations, NGOs and neighbours in the various locations. In view of the pollution of the oceans, everyone is called upon to use plastics with care and consciousness for the environment. 80% of this pollution is due to pollution of the land. The search for a solution must therefore also take place on the land.



4 Non-food packaging from post-consumer raw materials

Plastic is a resource – conclusion and outlook

Plastic is a versatile, high-performance and long-lasting raw material without which our global day-to-day life is inconceivable. Once it has fulfilled its function as a packaging, it does not simply become useless waste. This is because at the end of its life-cycle, plastic is undoubtedly a valuable resource.

But only if consumers convey their used packaging to be properly recycled, can it realise its full potential. It is only through recycling that valuable materials remain in circulation, which conserves resources, protects the environment and the climate and makes a decisive contribution to avoiding plastic pollution on the land and therefore also in the sea. In Germany, we already have a strong plastic recycling industry compared with Europe and the rest of the world. In order however to enhance this valuable material as a resource, we believe that communication with consumers must be considerably improved. This is because it is not sufficient to encourage final consumers to dispose of waste correctly. Conscious handling and recycling of waste will become even more obvious for final consumers if



5 used packaging has to be collected. Plastic materials are raw materials.

they regard used plastic packaging as raw materials.



According to a representative questionnaire carried out by tns-infratext on behalf of the German Packaging Institute, 92.2 per cent of people in Germany are interested in the subject of packaging.²⁾ More than half, however, feel that they are insufficiently informed in order, for example, to assess the ecological balance and recycling of an item of packaging. Consumers wish to receive improved information from the trade and from industry. In future, Jokey will increasingly fulfil this expectation and, as part of this process, also raise awareness of the value of used packing as a resource. For this reason, we intend to intensify our exchange of opinions with market participants, stakeholders and the public in order to make our contribution to a comprehensive process of enlightenment.

For example, in future we will display QR codes on our packaging in order, in particular, to enlighten end consumers on the importance of proper recycling and to provide recommendations on how to ensure the complete circulation of plastic materials. Should politicians wish to install redistribution routes devoted to plastic packaging, our packaging can of course also be used as part of a re-use process.

Moreover, together with participants who share responsibility in industry, trade and politics, we are continuing to work on the development throughout the world of collection systems with the aim of accelerating closed circulation systems for valuable resources. Jokey already undertakes a great deal in order to minimise pollution of the environment due to plastic packaging. But this is a task which involves the whole of society.

Accordingly, the limits of our commitment are to be found, amongst other things, at the interface with final consumers who also have to accept their responsibility in how they treat the raw material. Jokey is excellently equipped for sustainable recycling management. And we will continue to do everything in order to contribute our part of the responsibility with all market participants throughout the whole value creation chain.

We hope that we have been able to answer your questions adequately with this letter.

Yours sincerely

Additional information:

Jokey Ecology Concept

<https://www.jokey.com/de/packaging/recyclebare-verpackungen/>



GREY is the new GREEN

<https://www.jokey.com/de/service/news/initiative-grey-494/>

Sources

- 1) https://gvmonline.de/files/marktmenge_verpackungen/2004_07_Verpacken_ohne_Kunststoff_-_Zusammenfassung_der_Ergebnisse.pdf
- 2) Questionnaire carried out by tns-infratest on behalf of the German Packaging Institute: <https://www.presseportal.de/pm/25054/3963932>

Also interesting: "Data and facts. Resource efficiency of plastic packaging"

<https://www.kunststoffverpackungen.de/show.php?ID=5739>

Picture material

Pictures 1-4 Jokey

Picture 5 Adobe/Fotolia Jon Schulte