Choosing polybags

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Polybags in recycled material

Plastic is an important material for the packaging products we supply and will continue to be so in the future. Plastic packaging is durable, light and versatile.

The majority of polybags we supply are made from recycled LDPE=Low Density Polyethylene. This material is flexible, prints well and has a soft feel to it. It is also strong and with resistant heat cut edges. These Nilörn bags are made from 50-100% recycled material dependent on individual client needs. We encourage recycling after use.

Mix of materials

The polybags are made from a mix of materials: Production Waste: Off cuts and waste material generated during the bag production process. Post Consumer Waste: Include products such as film wrapping, shrink wrap, bags etc. Product that has come to the end of life.

Weight

Nilörn recommends 40 microns depending on the size of the bags as being the lowest micron that will give best product performance and least wastage during the manufacturing process.

Variations

Whilst every endeavour is taken to keep bags to the look and feel of the approved quality. There can always be within the batches of recycled material slight differences in thickness and clarity of the bags. This is due to the recycled nature of the material and is unavoidable.

Print

Recycled LDPE prints work very well in black, white and colours. Printing on one side where possible reduces the ink coverage and the number of plates required in the manufacturing process. This also makes the bag easier to recycle again, if there is limited print coverage and colours.



Post Consumer/Industrial waste collected ready to be recycled.

Recycling

Nilörn bags should be sent to recycling after use. Europe produces 29 million tons of plastic waste, more than 60% of that waste is from packaging and of that approximately 46% is recycled, 37% goes to energy recovery and 17% to landfills.* There is a big variation between countries and regions when it comes to plastic recycling. We believe that using recycled material is one step in the right direction as the increased demand will encourage an improved recycling infrastructure.

Recycling one tonne of plastics can avoid the emissions of 2.5 tonnes of CO2 when produced from virgin materials, and 2.7 tonnes of CO2 emissions if incinerated.

Source: EuRIC Plastic Recvcling Factsheet

Our commitment:

- Ensure our plastic packaging is reusable and/or recyclable
- Decrease the use of virgin plastic in packaging we deliver
- · Increase the share of post-consumer recycled content target across all plastic packaging we deliver
- Be innovative, develop and evaluate reuse models where relevant
- Eliminate problematic or unnecessary plastic packaging
- · Our internal plastic packaging is 100% recycled material

Packaging obligations

Navigating the ever-changing landscape of packaging obligations and marking requirements can be overwhelming. Our dedicated Compliance Specialist can help identify the most suitable marking solutions for your packaging.



^{*} Source: Plastics Europe, Plastics - The Facts 2022

Labels, certifications and standards



The Blue Angel is an environmental label that was initiated by the German government in 1978. It is awarded by an independent jury to products that are environmentally friendlier than other products designed for the same purpose. The label is also designed to act as a guide for sustainable purchasing for consumers and procurement departments. The label itself sets out specific standards that need to be met, with respect to environmental, health and performance characteristics. The Blue Angel promotes the concerns of both environmental protection and consumer protection.



The Global Recycle Standard (GRS) is an international, voluntary, full product standard that sets requirements for third-party certification of recycled content, chain of custody, social and environmental practices and chemical restrictions. The GRS uses the ISO 14021 definition of recycled content, Nilorn Bangladesh, East Asia/Shanghai, India and Portugal are holder of GRS certificate.



EuCertPlast certification is for plastic recyclers. The scheme focuses on traceability of plastic materials throughout the entire recycling process and supply chain, and on the quality of recycled content in the end-product. The certification scheme itself works according to the European Standard EN 15343:2007.

RecyClass

RecyClass is a non-profit, cross-industry initiative facilitating the transition toward a circular plastic future. RecyClass aim is to improve the design of packaging so that it is easily recyclable into a quality secondary raw material to then be used in a new plastic product. RecyClass Certifications are voluntary audit schemes, that demonstrate the degree of recyclability of plastic packaging and recycled content of plastics used in products.



"Product made from recycled materials" by DIN CERTCO certification focuses mainly on the assessment of the system of traceability and for calculating the recycled content in the products. It ensures the recycled content of a product has been declared according to the requirements of the standards EN ISO 14021, in conjunction with EN 15343 for traceability. In general the certification is a full product-cycle auditing. Each part of the production process, starting from producer of the re-granules to the end of final product is subject to auditing.



Design for recycling

- guide for the recyclability of polybags

- Avoid the use of paper-adhesive stickers. If possible, they can be substituted with clear PE stickers
- Ensure polybag design is as close to 100% LDPE as possible
- Use minimal to no ink, wherever possible. Direct laser marking is preferred
- Any adhesives used must be water soluble below $60^{\circ}\,\mathrm{C}$
- Source polybags that conform to commonly accepted restricted substance lists

Source: Fashion for Good in collaboration with the Sustainable Packaging Coalition, 2019

Choosing polybags - a quick guide

Recycled LDPE and alternatives

Depending on the individual application and requirements, there is feasible alternatives to recycled LDPE polybags. However, they also present their own benefits and challenges that must be carefully considered. Nilörn does not offer biodegradable and water-soluble polybags, as we believe packaging for textile goods should be collected and recycled. We also see different challenges associated with biodegradable packaging, especially the lack of data showing full and safe breakdown in natural environments.

As a supplier, Nilörn is planning to take significant steps towards improved recyclability and increased use of recycled content. Through our commitment to sustainability, we strive to play a pivotal role in driving positive change within the industry.

Option	Recycled LDPE	Biobased LDPE	Compostable PLA	Glassine Paper
Raw material	Recycled LDPE, made from pre- and post-consumer plastic waste	Biobased LDPE, made from sugarcane	PLA, made from corn	Paper, made from wood pulp
End-of-Life	Recyclable with plastic	Recyclable with plastic	Organic recycling	Recyclable with paper
Benefits	Good technical performanceReduction of plastic wasteRecyclable monomaterialRecycling infrastructure available	 Good technical performance Made from renewable resource Recyclable monomaterial Recycling infrastructure available 	Made from renewable resource	Widespread recycling infrastructureMade from renewable resourceBiodegradable in different natural environments
Challenges	 Still uses fossil-based material Problems with odor and color Takes a long time to decompose in nature Regional differences in plastic recycling 	 Cultivation of biomass Takes a long time to decompose in nature Regional differences in plastic recycling Virgin material 	Cultivation of biomassLimited recycling infrastructureLimited shelf lifeVirgin material	Cultivation of biomassLimited technical performanceVirgin material
Availability at Nilorn	Widespread global availability	Limited global availability	Moderate global availability	Moderate global availability
Labels available	GRS, Blue Angel, RecyClass, EU Cert	I'm green™ Bio-PE	Biobased and compostability certifications	FSC™



Some frequently asked questions

Q: Why do we recommend recycled LDPE material for polybags?

A: Recycled plastic reduces waste, as the increased demand will encourage an improved recycling infrastructure. It allows unlinking from fossil feedstocks and reduction of greenhouse gas emissions. By 2030, all plastic packaging placed on the EU market should be reusable or recyclable.

Q: What is pre-consumer material?

A: Material diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it. It can for example be unusable trimmings in paper or textile industry, obsolete stock, defective products with irregular colours or quality, edges of plastic bags, etc. It can be scrap that is reprocessed into a feedstock material and then used in manufacturing the same product that it originated from. Sometimes also called "postindustrial" material.

Q: What is post-consumer material?

A: Material generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product which can no longer be used for its intended purpose. This includes returns of material from the distribution chain. It is material which has served its intended purpose and the consumer has no use for. Examples: Wrapping film from pallets, newspapers, collected aluminium cans and used PET-bottles.