

Helping great products reach more
people, more easily

Terminology

Huhtamaki

Material classification

Recyclable:

Recyclable products are ones that can be reprocessed and the resulting material is manufactured into new products.

Repulpable:

This refers to the degree to which paper materials can be converted back into pulp during the recycling process to form new fiber sheets.



Renewable:

Made from a natural resource which replenishes to overcome resource depletion caused by usage and consumption, either through biological reproduction or other naturally recurring processes in a finite amount of time in a human time scale.

Non-renewable:

A non-renewable resource is a resource of economic value that cannot be readily replaced by natural means on a level equal to its consumption.



Compostable:

Materials which can fully decompose back to the soil in a set time frame and under pre-defined conditions are considered compostable.

Currently, products must be described as Industrially Compostable or as being Compostable in Approved Facilities.



Biodegradable:

Biodegradable materials decompose into small pieces through changes to the environment and structure of those materials.

Our preference is not to use the term biodegradable



Certifications

EN13432:

The European norm for compostability of packaging. Products certified in accordance with EN13432 are allowed to carry the European official compostable “Seedling” logo*

All Bioware products are compostable and certified in accordance with EN13432. This means that Bioware products degrade in industrial composting facilities within 90 days.



PEFC (Programme for the Endorsement of Forest Certification):

PEFC is the world's largest forest certification system. It sets standards to transform the way forests are managed globally, and locally, to help all enjoy the environmental, social and economic benefits that forests offer.



FSC (Forest Stewardship Council)

FSC is a global, not-for-profit organisation dedicated to promotion of responsible forest management worldwide.



Swan Label:

The Nordic Swan or Nordic Ecolabel is the official sustainability ecolabel for the Nordic countries. It works through a voluntary license system where the applicant agrees to follow certain criteria, outlined by the Nordic Ecolabelling in cooperation with stakeholders.



*Other standards for compostability are ASTM D6400 plastics (USA), ASTM D6868 paper & coated paper (USA), BNQ 9011-911/2007 (Canada), Green PLA (Japan) and AS 4736-2006 (Australia).

Other key terms

Life Cycle Assessment(LCA)

An LCA (also known as life-cycle analysis, ecobalance, and cradle-to-grave analysis) is a complex technique to assess the environmental impacts associated with all the stages of a product's life. It starts with raw material extraction and goes to materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling. Designers use this process to help critique their products. It is increasingly popular with policymakers.

Plant based polymers/plastics

Plastics made from renewable feedstocks. For example, sugar is used to make PE, maize is used to make PLA. While a renewable feedstock can be used to make polymers, it does not mean the polymer is compostable. For e.g. our FutureSmart™ cups are lined with PE produced from plants, which has the same characteristics as PE produced from fossil fuel.

Plastics

Materials that can be reshaped (remolded) by applying heat and pressure. Most plastics are made from synthetic resins (polymers) through the industrial process of polymerization. There are 2 main types of Plastics:

Thermoplastics: Soft plastics which can be reshaped repeatedly by applying heat and pressure

Thermosets: Hard plastics that once formed into shape cannot be easily reformed into another

Microplastics

Plastic debris can come in all shapes and sizes, but those that are less than 5 mm in length (about the size of a sesame seed) are called microplastics. They come from a variety of sources, including from larger plastic pieces, that degrade into small and smaller pieces.

Microbeads are type of microplastics, which are very tiny pieces or manufactured PE plastic that are added as exfoliants to health and beauty products.

Recycling concepts

Bring Banks

- Dedicated collection containers
- Usually located in public places
- Intended to collect household waste
- Streets, supermarkets, dedicated recycling parks



Circular Economy

- Alternative to traditional linear economy
- Keep resources in use for as long as we can
- Extract maximum value while in use
- Recover and regenerate products and materials



Deposit Return Scheme

- Mechanism to incentivise return of used items
- To be reused or recycled
- Frequently talked about in relation to PET bottles and beverage cans



Infrastructure

- Waste collection, sorting and recycling infrastructure
- Major question is whether infrastructure in place enables circular economy
- Spoken in relation to the systems and infrastructure in a country



Kerbside collection

- Also known as door-to-door collection
- Collection of household waste placed in the street
- Can be used for different streams of used packaging
- Mixed recyclable packaging, paper/cartons, Plastics or glass



Green Dot

The Green Dot (originally from the German: Der Grüne Punkt) is the license symbol of the European network of industry-funded systems for recycling the packaging used for consumer goods. The presence of the Green Dot indicates that the company bringing the packaged product onto the market pays a contribution to a packaging recovery organization.

The symbol does not mean per se that a package is recyclable or recycled.

Many thanks!

Huhtamaki