Polystyrene

A versatile material for the food industry

PlasticsEurope
Association of Plastics Manufacturers

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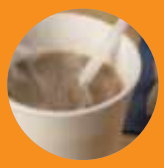


Naturally aesthetic

The natural transparency and brilliancy of polystyrene are two assets for an excellent presentation of foodstuffs at the point of sale.

Natural style

Increased food appeal

Advantageous design flexibility

Today's stylists and designers have been won over by polystyrene. It allows them to fully express their creativity, because the very nature of polystyrene makes it greatly superior to other materials when it comes to the creation of shapes and colors.

CREATIVE

PRACTICAL

MODERN

INTELLIGENT

SURPRISING

ELEGANT

LUXURIOUS

Facilitates creativity

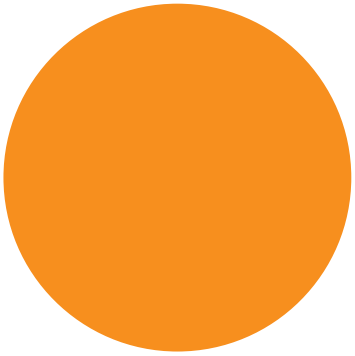
- Simple and flexible conversion process
- Tailor-made physical properties for packaging made possible by mixing HIPS and GPPS
- Additional freedom in shapes and colors

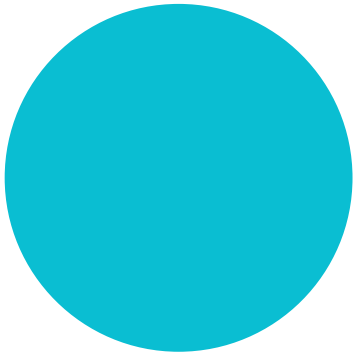
The new line by a famous designer

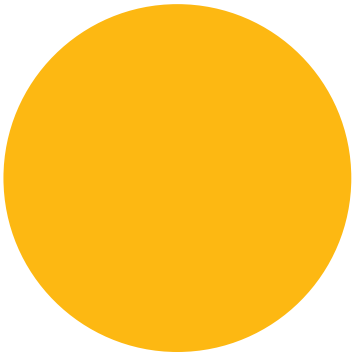
Everyday convenience

With HIPS and GPPS resins, you get a toolbox of raw materials that allows you to truly adapt to the needs of your customers.

Get the functionality that you want



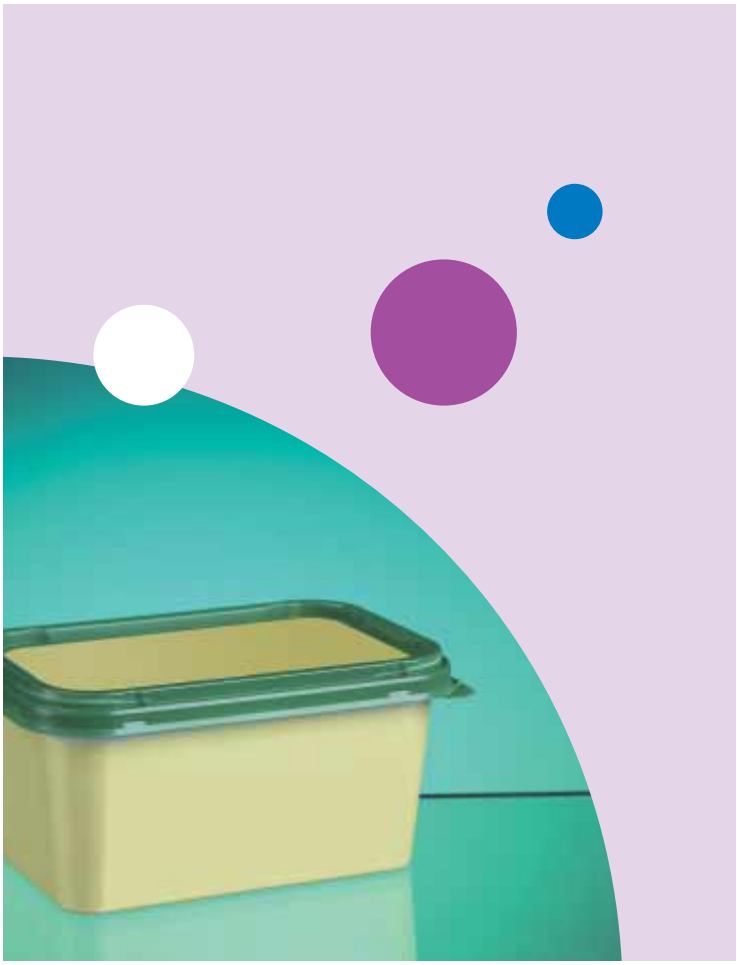




Everyday convenience

Customized packaging and better-preserved portions

- Enhanced freshness and longer-lasting nutritional value
- Less need for preservatives
- Packaging sizes adapted to customer requirements
- Perfect transparency



Cups are sturdy

- But lighter and less fragile than glass

Hot drinks may be held in the hands

- Unique consumption comfort
- Enjoy your hot drink longer

Safety without compromise

In the food sector, the degree of safety offered by a packaging material is a critical component in its evaluation.

Over 50 years of experience, tradition and safe use

- A true pioneer in food packaging applications
- In-depth knowledge of the food industry built over the last 50 years
- One of the most scrutinized plastics in the world

Superior hygiene guaranteed

- Protects food from bacteria and moisture
- Guaranteed quality and longer shelf life

Better food protection

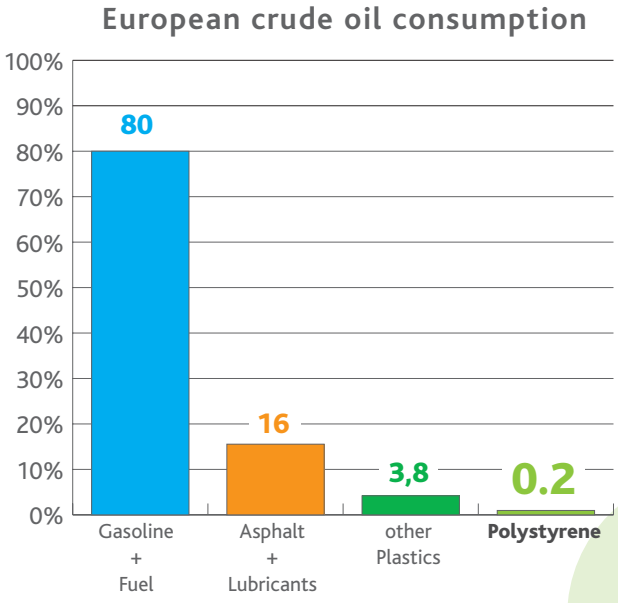
- Lightweight but affords significant mechanical rigidity
- Food protection reinforced through forms adaptable to specific foodstuffs
- Shape and quality retention over long periods of time

Safer transport and in-store handling

- Polystyrene packages are not damaged during use
- Glass may crack or even break
- Cardboard cannot withstand humidity

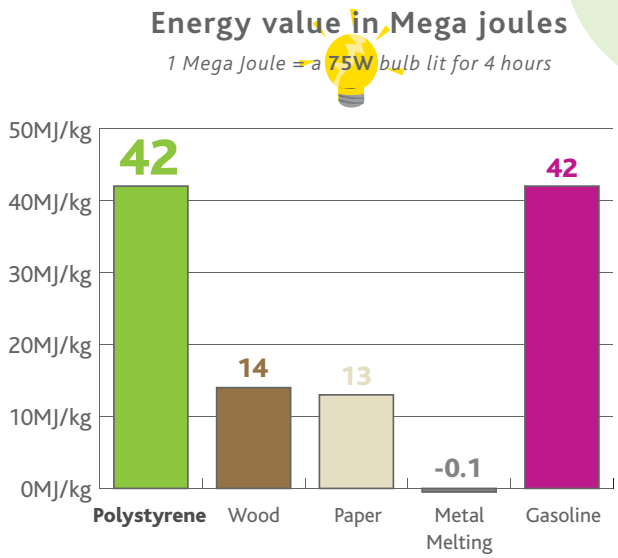
Multiple environmental benefits

A life-cycle analysis (LCA) of a product is the best method to evaluate its environmental impact, from the production of the raw materials that serve to create it right up through its scrapping or recycling. Applied to packaging materials, LCA reveals the superiority of **polystyrene** compared to other materials like glass or cardboard.



Made from a by-product of petroleum refining

- Produced from naphtha, a product remaining after the transformation process of petroleum in refineries
- Represents only 0.2% of the quantity of crude oil used in Europe



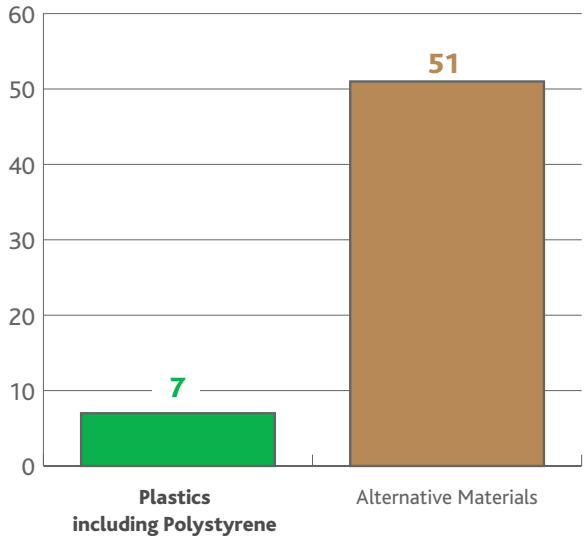
Energy recovery

- Although neutral to the environment, polystyrene should not be discarded in landfill
- Supplies far greater heat during its combustion in incinerator than wood or paper, partially compensating for the fuel needed for its incineration
- This heat may serve to produce electricity or supply district heating systems

Lower CO_2 emissions

Greenhouse gases emission - *GUA study*

(CO_2 Equivalents in Million tons/year)

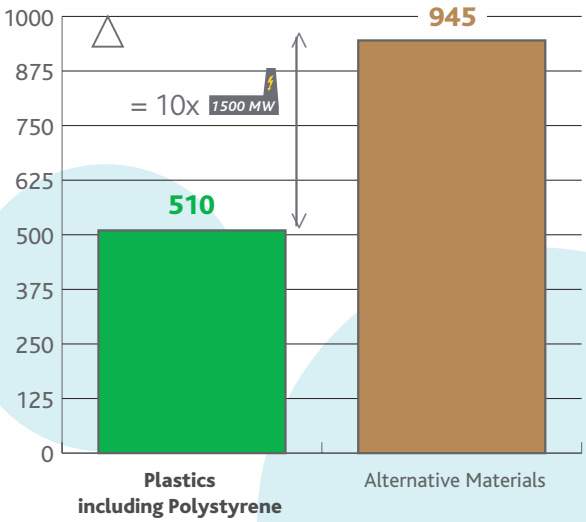


Lower energy consumption

Energy consumption - *GUA study*

(Production + Use-Phase + Waste in Million Giga Joules/year)

43 Giga Joules = electricity energy produced by a 1500 MW power plant output



GUA[1] (Gesellschaft für umfassende Analysen) has studied a scenario under which plastics for packaging would be substituted wherever possible, and calculated the subsequent environmental consequences.
For the complete GUA study with full details, please go to www.plasticseurope.org

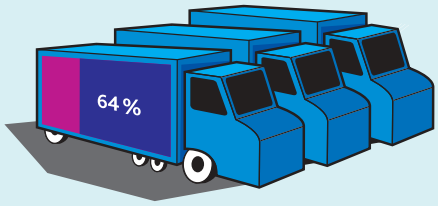
[1] "The Contribution of Plastic Products to Resource Efficiency", January 2005.

Multiple environmental benefits

Contributes to less transport pollution

- A yogurt pot made from polystyrene weighs about 15 times less than containers made from non-plastic materials

Non-plastic material: 36% packaging, 64% product



Polystyrene: 4% packaging, 96% product

Not better, not worse. Simply different from bio-based plastics

Polystyrene and bio-based plastics differ in the raw materials they use, their production processes and their end-of-life management.

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