



Packaging Solutions



PROFOAM

High-quality versatile foam to deliver maximum product protection

Polyethylene Foam

We manufacture high-quality protective foam to the complete satisfaction of our customers, ensuring tailor-made benefits:

- ✓ 100% recyclable polyethylene
- ✓ Highly shock- and tear-resistant
- ✓ Economical
- ✓ Light and easy-to-handle
- ✓ Moisture-resistant
- ✓ Hygienic
- ✓ Anti-static
- ✓ CFC free, non-harmful to the ozone layer

Polyethylene foam is one of the most versatile packaging materials in the market. It is a perfect substitute for traditional materials and has become a great complement to corrugated packaging materials.

Advantages:

- More product protection (better mechanical performance)
- Minimizes required amount of packaging material
- Washable; highly resistant to cleaners
- Easy-to-use, decrease in labor
- Decrease in packaging material costs
- CFC and HCFC free
- Recyclable

Applications:

Polyethylene foam has unlimited uses. Some applications include: packaging and packing in general, injection molding, handicraft, museum and archeological pieces, furniture protection, fruit and vegetable protection, sports protective gear, mattresses, lifejackets, glassware, computer equipment, electronic pieces and instruments, TV, audio and video, electrical appliances, medical equipment, and breakables, among others.



Specifications

1. PRODUCT

POLYETHYLENE FOAM

2. FOAM FEATURES

FEATURES	VALUE	STANDARD
CELL STRUCTURE	Closed	-
DENSITY	20-30 kg/m ³	ASTM 1622
WATER PERMEABILITY	Impermeable	Dir. UEAtc
WATER VAPOR PERMEABILITY	0.033 g/m ² hkPa	ASTM E 96/IRAM 1735
LIGHT BEAM PERMEABILITY	52-63 %	-
DIMENSIONAL STABILITY UNDER HEAT	Longitudinal -4.5/-4.2% Transversal +0.3/0.8 a (700C x 22hs)	-
MINERAL OIL RESISTANCE	SAE 30 15 días a 230C	-
OZONE RESISTANCE	No cracking Rating 0	ASTM D 1171
COMPRESSION RESISTANCE	25% CD 6PSI (41.4 Kpa)	ASTM D 1621
STRESS RESISTANCE	58 PSI	ASTM D 3575
MAXIMUM ELONGATION	123%	ASTM D 3575
TEAR RESISTANCE	16 Lb/pulg.	ASTM D 3575



STATIC PRO

Foam to protect your products
from static electricity

Static-Free Foam

Prodex® pink anti-static foam additives include a protection barrier to prevent foam from being charged with static electricity, very harmful to different electronic components.

Advantages:

- Reduces handling and shipping damages to 25%
- Protects from static charge
- More mechanical protection for the product
- Weightless (saving in shipping)
- Flexible and versatile
- Moisture-resistant
- Recyclable/ CFC and HCFC free



Applications:

For packaging and packing of:

- Electronic pieces and instruments
- Computer equipment, TV, audio and video
- Medical equipment and electrical appliances



PRO NET

Foamed polyethylene mesh to
protect your products

Mesh/Netting

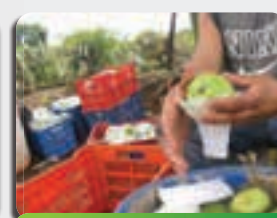
Our foamed polyethylene mesh has been designed to protect fruits individually or in groups. This netting offers effective protection, especially during shipping and packaging, allowing for fruit and vegetable ventilation and thus preventing early product ripening. Additionally, mesh gives products a nice appearance when arranged in displays at points of sales. In addition to this, product packaging is an easy, quick and sanitary process, unlike other corrugated solutions allowing for the growth of fungi and bacteria.

Advantages:

- Reduces fruit loss to 25-30%
- Slows ripening
- Provides protection and ventilation during fruit growth, shipping and display
- Easy, quick and sanitary packaging process
- Unique design adapted to the shape of the fruit to be packed
- Improves product appearance at points of sale
- Washable and moisture-resistant
- Recyclable/ CFC and HCFC free

Applications:

In general terms, for sensitive peel products such as mangoes, papayas and apples, and for protection of bottles, glassware and flowers



MULTIPACK

Tailor-made
protective foam

Special Products

Specific solutions for specific needs; light and resistant designs ensuring product protection

Advantages:

- Protects products, preventing any movement inside the box
- Reduces cost and amount of required packaging material
- Easy-to-use, decrease in labor
- Moisture-resistant
- Washable
- Highly resistant to cleaners
- Recyclable
- CFC and HCFC free

Applications:

- Filling material for general packaging



COVER PRO

Protection guaranteed

Packaging and Protection Reeds

Prodex® reeds provide a highly effective, light and practical solution for shipping, protection and display of products, ensuring best use of space and reducing logistics costs.

Advantages:

- More mechanical protection to the product
- Reduces amount of required packaging material
- Easy-to-use, decrease in labor
- Moisture-resistant
- CFC and HCFC free/ Recyclable

Applications:

Polyethylene foam reeds are mainly used for packaging all sorts of furniture, for they are easily adapted to furniture shapes.



Packaging for the Banana Industry

In Prodex®, we produce polyethylene foam with the right texture, density and thickness to protect this fruit from early development stage to dispatch to end users. Our closed cell polyethylene foam designs have proved to be effective in fruit protection. Their versatility allows for different applications in terms of shape, thickness and color during fruit development stage and packaging.

Advantages:

- Significant improvement in fruit quality and performance, preventing defects caused by rubbing at different stages of the process
- Closed cell for product safety
- Easy-to-use, decrease in labor
- Highly moisture-resistant
- Resistance to microorganisms
- Washable and reusable
- CFC and HCFC free
- Recyclable



Applications:

Early Protection Sheet

- Perforated, low thickness bib sheet
- Used in week two before putting in a bag
- Protects fruit for more productivity
- Improves quality by preventing:
 - ✓ Raised scarring
 - ✓ Deformed curved banana
 - ✓ Damage when handling and shipping to packaging company
- Increases ratio to 7% on average*

Tray Protection Sheet

- Smooth polyethylene sheet adapted to tray shape
- Protects fruit from damage caused by rubbing or friction on tray's rough surface at packaging company

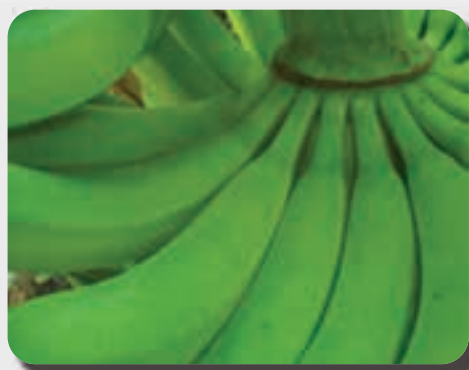
Bib Sheet

- 12 mm thick bib sheet lined with special fabric for better performance
- Protects fruit when shipping from plantation to packaging company
- Used for fruit calibration
- Shelf life of up to two years

Special Applications

- 2-4 mm thick foam sheets used for banana packaging
 - Protects fruit from shipment to final destination
- *Effectiveness of banana boxes, in bunches





PALLET COVER

Reflective thermal insulation
to keep product temperature
stable

Reflective Thermal Lining

Reflective thermal lining is made of pure aluminum layer, 5 mm polyethylene core, and laminated aluminum layer. It maintains cold chain (product internal temperature) for up to 36 hours, preventing costly losses for early product ripening on the inside.

Advantages:

- Keeps your product in excellent thermal conditions
- Design maximizes load space in container
- Effective vapor barrier maintains perfect temperature for your product
- Prevents heat absorption
- Washable and safe for food

Applications:

Perishable products require controlled temperature shipping, such as fruits, vegetables, pulses, meat, seafood, flowers, and ornamental plants.





PROTECTION BAGS

Complete Protection for Every Need

Prodex® introduces new product line PROTECTION BAGS (polyethylene foam bags) to the market. These bags are so versatile that they can be tailored to customer needs. Additionally, our bags have the necessary physical properties of an anti-shock material, lessening any impact.

Given its changing possibilities, the new line of PRODEX PROTECTION BAGS provides for a wider scope of application, developing any design in terms of shape, color and thickness. Thanks to their texture and density, our closed cell polyethylene bags have proved to be the cleanest, most versatile, resistant, economical and efficient solution, accounting for their use in packaging and protecting all sorts of products.

PROTECTION BAGS ARE:

- ✓ 100% recyclable polyethylene
- ✓ CFC free, non-harmful to the ozone layer
- ✓ Highly shock- and tear-resistant
- ✓ Closed cell
- ✓ Mechanical protection
- ✓ High mechanical resistance
- ✓ Vapor barrier
- ✓ Bag breathing
- ✓ Anti-static
- ✓ Fast Action seal (adhesive tape)
- ✓ Moisture-resistant: keeps packaged products dry
- ✓ Resistant to chemicals (common acids, solvents, detergents, lubricating oil, among others)
- ✓ Thermal protection: prevents excessive temperatures from directly affecting packaged products





Perforated Bags for Product Ventilation

(sealed base and sides)

These bags are designed to ensure the best protection and extend to the maximum extent possible the shelf life of products through holes, allowing ventilation of packaged products; perfect for perishable products.

Advantages:

• Oxobiodegradable

- Packed product ventilation
- Product waste reduction
- Expands shelf life of products
- Fast Action seal

Applications:

- Imported fruits such as grapes, apples, strawberries, nectarines, pears, avocados, etc.
- Dairy products
- Meat and seafood
- Flowers / exports



Perforated Bags for Product Ventilation (economical option)

(sealed base and sides)

Reliable, versatile and cost-effective, polyethylene foam bags offers a wide variety of shapes and sizes, providing the best protection for your product. They are easily and quickly manufactured. Our Basic Bags, the most economical option, are characterized by reducing costs for packaging materials and yet not compromising product protection. Perfect for online workstations

Advantages:

• Oxobiodegradable

- Very economical
- Anti-shock protection and compression
- Versatile
- Light protection
- Fills empty spaces
- Fast Action seal

Applications:

- Packaging in general
- Handicraft
- Archeology
- Furniture protection
- Fruit and vegetable protection
- Sports gear
- Mattresses
- Glassware
- Musical instruments
- Liquors
- Breakables





THERMAL BAG

Prevents Excessive Temperatures from Affecting Packaged Products

(sealed base and sides)

Thermal Bags are highly flexible bags with extraordinary physical properties, including insulation, protection and a variety of applications. Given their thermal properties, our bags keep your food cold and frozen for up to three hours. Our thermal bags are easy-to-store anywhere, ready to carry hot or cold food and beverages.

Advantages:

- Reduces chances of thermal shocks
- Reflects radiant heat
- Keeps products hot or cold for a longer time
- Moisture-resistant
- May be used with gelpack or dry ice packs
- Fast Action seal

Applications:

RECOMMENDATIONS FOR HOT USE

- Perfect for fast food restaurants
- Extraordinary use for take-out food
- Keeps pizza hot

RECOMMENDATIONS FOR COLD USE

- Keep food frozen during shipping for longer hours
- May be used as ice bucket
- Special to carry cold beverages such as wine, beer, soda, juice, and the like
- Keeps meat such as beef, pork, fish and seafood for a longer time
- Carries wine at proper temperature
- Perfect and convenient to bring food and beverages to parties, recreational places, and beaches
- Recommended for car traveling



TOUGH BAG

Airtight, Tough and Waterproof Bags

(sealed base and sides)

These low-density, polyethylene foam bags are extremely tough, highly shock and tear resistant, and waterproof. They feature an airtight seal (Fast Action seal included). They are reusable and may be opened and closed as many times as needed without tearing up. Tough bag was designed for maximum product protection and effectiveness.

Advantages:

- Waterproof and moisture-resistant
- Airtight (no dripping)
- High mechanical resistance
- Full shock coverage
- Resistant to chemicals (common acids, solvents, detergents, lubricating oil, among others)
- Fast Action seal



DID YOU KNOW THAT...

More than **100 thousand** marine animals die every year from **plastic suffocation?**

Around **90%** of all products are **disposed before 6 months** of purchase?

Average time it takes for traditional **plastic to decompose** is **400 years?**

NO ENVIRONMENT MEANS NO FUTURE

Now our Prodex Packaging products can be manufactured using Oxo Biodegradable Technology.

USING OXO BIODEGRADABLE PRODUCTS FOR A CLEANER WORLD!



**WE CAN SAVE THE WORLD
IF WE ALL DO OUR PART
Prodex[®] is making efforts
to protect the environment**

What is Oxo Biodegradable Technology?

With Oxo Biodegradable Technology, plastic is degraded and absorbed back into the environment. At the end of process, plastic is 100% destroyed, resulting in water, minimum amounts of carbon dioxide buried in the ground as nutrients (no greenhouse effect or global warming) and a biomass easily consumed by microorganisms such as fungi and bacteria, leaving no fragments in the soil. This technology is based on the introduction of a small amount of additive to the traditional process of manufacturing products. These additives are inert, completely safe, leaving no toxic waste.

Thanks to Oxo Biodegradable Technology, this material is no longer plastic and becomes a source of food instead.

PRODEX® incorporates Oxo Biodegradable Technology to their packaging products



This environmental project developed by Prodex® is the first of its kind in Central America and the result of years of research to take a major step forward in fighting plastic pollution.

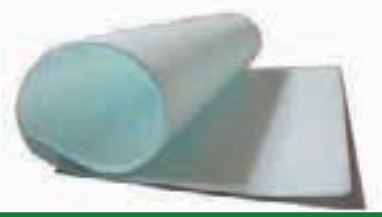
How does Oxo Biodegradable Technology work?



Picture of plastic in the Oxo-degradation process, taken from an electron microscope



Biomass-consuming colonies of bacteria and fungi grow in polymer cracking areas



Prodex® Advantages – Oxo Biodegradable Packaging:

- ✓ Economically viable
- ✓ Option for environmentally aware consumers
- ✓ No industry changes required
- ✓ Degradable shelf life
- ✓ Completely safe, no toxic waste left
- ✓ No adverse effects during extrusion stage



Oxo Biodegradable Technology is only used for Prodex® Packaging products.



In times when environmental commitment should be part of the foundations of any company, Prodex® has taken on the challenge of being 100% environmentally friendly.

Prodex® is comfort in harmony with the environment. Their commitment to protecting the planet for future generations is unquestionable and, once again, they prove it by incorporating Oxo Biodegradable Technology to their packaging products.



Comfort in harmony with the environment



Business Alliance for Secure Commerce



Comfort in harmony with the environment

Telephone: (506) 2438-2322 / Fax: (506) 2438-2341
www.prodexcr.com