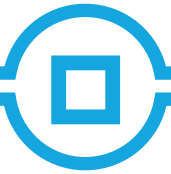


BARRIER TECHNOLOGY



SURFACE MODIFICATION



HOUSEHOLD PRODUCTS

Plastics are prized for their light weight, design flexibility, reduced transportation cost, and sustainability.

Inhance Technologies' Fluoro-Seal Process® and Reactive Gas Technology® provide innovative benefits for plastics, helping Consumer Product Goods designers and engineers improve performance, manage costs, reduce design complexity, and enhance the durability of their products.

Polyolefins are among the most broadly used plastics today in the Consumer Product Goods market due to their excellent properties, performance, and sustainability.

While polyolefins tend to be excellent materials for many products, their surface properties limit their utility and may not be suitable for all product formulations.

By utilizing our Fluoro-Seal Process® and Reactive Gas Technology®, designers and engineers can overcome these limitations, providing greater flexibility in creating the products of tomorrow while enhancing the products of today.

APPLICATIONS

Home Storage & Organization

- Office Storage
- Bedroom Storage
- Garage Storage

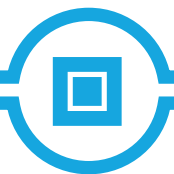
Kitchen

- Food Storage
- Serving Utensils
- Dishware
- Kitchen Appliances
- Water Filtration

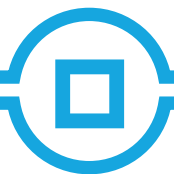
Household Cleaners & Chemicals

- Laundry Detergents
- Dish Detergents / Soaps
- Cleaning Apparatus
- Air Care





BARRIER TECHNOLOGY



SURFACE MODIFICATION



BENEFITS OF REACTIVE GAS TECHNOLOGY®

- Enhanced resistance to stain-causing ingredients enables longer product life for food storage products
- Enhanced adhesion can help manufacturers sustain their printed brand image through the lifetime of the product, while enabling usage of water-based inks and adhesives
- Increased surface energy and modified surface chemistry allow for better wetting and adhesion across different material substrates
- Long-lasting treatment enables manufacturers to store intermediate finished goods long-term for future printing/ usage
- Enhanced wettability of products enables moisture management
- Improvements in lubricity and wear properties help to extend the life time of a product

BENEFITS OF FLUORO-SEAL PROCESS®

- Enables consistent and uniform surface modification of plastics parts regardless of size and complexity enabling full surface treatment - inside and outside
- Prevents content loss, flavor loss, container paneling, label flagging, discoloration, softening, and odor emissions
- Greatly reduces permeation through and absorption of contents into the container wall



The Inhance Fluoro-Seal Process® seals the entire container, inside and out - creating a double-sided barrier to resist permeation while enabling printability of the surface.

Data below shows weight change of select solvents in barrier-treated PE containers. Weight loss measured after storage at 50° C for 28 days.

		WEIGHT LOSS WITH BARRIER TREATMENT
CHEMICAL	% CHANGE IN WEIGHT	EXAMPLE USES
Butyl Acetate	-1	Dry Erase Markers Liquid Wrench No Odor Spray
Cyclohexanone	-0.17	Overglaze Primer
Ethyl Acetate	-2.7	Fabric Protector Spray Paint Overglaze
Hexane	-0.31	Parts Cleaner Spray Adhesives
Naptha	-0.06	Polyurethane Gloss Finish Scratch Remover Products Furniture and Shoe Polish
Toluene	-0.5	School Glue Paint Rust Prevention Products

*Source: Woishnic and Ebnesajjad. Chemical Resistance of Thermoplastics



Inhance Technologies solutions can be applied in a number of industries to improve product.

INHANCE

INHANCE TECHNOLOGIES

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