



Grayling Industries provides industrial packaging solutions for processors of bulk materials

Intermediate Bulk Containers

- PaperIBC – One way container
- Buckhorn – Collapsible container
- FIBC – Bulk bags

Intermediate Bulk Container Liners for Dry Products

- Form Fit Liners
- Foil Liners
- Custom Liners
- Clean room produced liners
- Baffle Liners

Intermediate Bulk Container Liners for Liquid Products

- Form fit liners
- Pillow style liners
- Round Bottom Drum Liners

Container Liners for Dry Products

For more information go to www.graylingindustries.com » Industrial Packaging Products

Guardian Form-Fit liners are designed to custom fit rigid and flexible intermediate bulk containers and provide several processing, handling, space utilization and shipping advantages.

Guardian Form-Fit liners:

- Fill and dispense more quickly with less labor.
- Fill and dispense more completely because there are no folds or pleats to trap material.
- Eliminate production problems due to liner material dispensing from FIBCs with the product into processing equipment.

- Reduce freight and warehousing costs by using space more efficiently.
- Reduce or eliminate container cleaning costs
- Reduce waste disposal costs as form fit liners require less material than comparable liners
- Improve the appearance of your product by providing a consistently square and uniform package.

- Improves safety by providing a stable, stackable package.
- Are manufactured from a wide variety of films to suit your specific needs.

We stock several different film structures to address various performance needs; moisture or oxygen barrier, ultraviolet radiation inhibition, toughness and durability, anti static properties, softness and pliability, recyclability, biodegrad-

ability, economy, clarity or aesthetics. For handling dry bulk materials, Grayling designs and produces: foil laminated form fit liners, clean room produced form fit liners, baffled form fit liners, round bottom drum liners and other specialized products designed for industrial packaging.

Form Fit Liners



Guardian Form Fit liners for dry bulk materials in FIBCs, IBCs, corrugated boxes, bins and totes improves package performance and protects from contamination and leakage during processing, storage and transportation.

Foil Liners



Guardian Form Fit Foil liners for hygroscopic dry bulk materials in FIBCs, IBCs and corrugated boxes improves package performance and protects from moisture, contamination and leakage during processing, storage and transportation.

Clean Room Produced Liners



Guardian Clean Room Produced Form Fit liners are manufactured in a certified class 100,000 clean room. During the manufacturing process the liner is never opened, thereby greatly reducing the opportunity for any particulate contamination.

Baffle Liners



Guardian Baffle liner makes IBCs, like bulk bags or Gaylord boxes, more square and stable. The liner is form fitted to the outer container and utilizes internal baffles to prevent the outward push of the dry flowable materials being packaged that could otherwise result in a rounded package that wastes space on the pallet, in a truck or in an ISO container.

Container Liners for Liquid Products

Guardian liners for bulk liquid containers provide a sanitary environment for your product during shipping and storage and eliminate the need for costly and time consuming container cleaning.

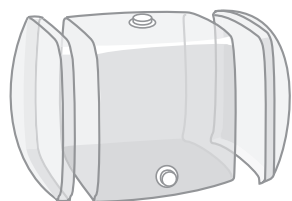
Guardian liners for bulk liquid containers provide a sanitary environment for your product during shipping and storage and eliminate the need for costly and time consuming container cleaning as the IBC is immediately available for reuse once the used liner has been removed.

Guardian liners for packaging and handling bulk liquids are available in either

the pillow or form fit design. A pillow style liner is a sealed flattened tube with fitments attached for filling and dispensing. The liner looks like a bed pillow when inflated. The form fit liner is shaped like a cube to more closely fit the shape of the outer container. Guardian form fit liners for liquids are also available pre cassetted for use in disposable corrugated IBCs.

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Form Fit Liquid Liners



Guardian Form Fit liners for liquid bulk materials in IBCs, corrugated boxes, bins and totes improves package performance and protects from contamination and leakage during processing, storage and transportation.

The form fit liner is designed to closely match the interior dimensions of the IBC without creating any folds, creases or gussets to trap material during filling or dispense.

Pillow Style Liquid Liners



Guardian pillow style liners for liquid bulk materials in IBCs, corrugated boxes, bins and totes protects from contamination and leakage during processing, storage and transportation.

The liner allows the outer container to be reused instantly and eliminates the need for costly cleaning operations.

Bulk Containers

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In addition to manufacturing IBC liners, Grayling also offers complete intermediate bulk containers.

PaperIBC Corrugated Intermediate Bulk Container for Liquid Products

The PaperIBC is a heavy duty corrugated, "one-way" container for shipping and handling bulk liquids. The PaperIBC is an intelligent alternative to drums, bottle-in-cage IBCs and other "heavy footprint" types of intermediate bulk containers for non-hazardous liquids.

PaperIBC



80% less Space Required:
The PaperIBC requires 80% less space for storage and shipping than other non-collapsible IBCs.

48 Drums
48 empty 55 gallon drums = 12 pallet positions or 192 square feet

10 Bottle-in-Cage
10 empty bottle-in-cage totes = 10 pallet positions or 125 square feet

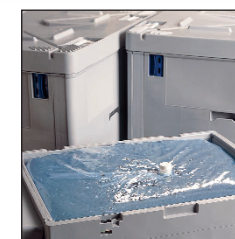
10 PaperIBCs
10 empty PaperIBCs that can package = 1 pallet position or 32 square feet

The PaperIBC container from Grayling Industries is a dependable, economical and environmentally responsible alternative to drums, bottle-in-cage and other "heavy footprint" types of intermediate bulk containers.

Buckhorn™ reusable intermediate bulk containers

Buckhorn reusable intermediate bulk containers from Grayling Industries are designed to provide maximum product protection, hygiene and efficiency.

Caliber 315



These injection and structural foam molded containers are compact, collapsible and designed to handle both fluid and dry products. They are a clearer advantage over traditional single trip, disposable alternatives.

Flexible Intermediate Bulk Containers for Dry Products

Grayling also makes available lined flexible intermediate bulk containers or FIBCs.

FIBC



Flexible Intermediate Bulk Containers, FIBCs or bulk bags are large woven polypropylene bags designed for storing and transporting dry flowable bulk products. FIBCs typically measure around 4 cubic feet in size with a capacity of 1 to 2 tons.

Round Bottom and Custom Liners

Guardian Round Bottom Liners for steel, plastic and fiber drums. Custom Liners are available.

For more information go to www.graylingindustries.com » Industrial Packaging Products

Guardian liners are an efficient and economical solution to the headache and expense of cleaning and or disposing of used drums.

Guardian liners are manufactured using engineered polyethylene film structures to provide durability, consistency and performance and are manufactured in an ultra clean environment to insure that your product stays pure and contamination free.

Round Bottom Drum Liners



Grayling keeps a large inventory of standard size drumliners in stock and we will also custom manufacture liners for your unique application.

Guardian Custom liner products are designed for specific, and typically unique, applications.

A custom liner may be required for an unusually shaped outer container. There may be a need for a special valve or other attachment. Fitments may be required in non-standard locations or there may be a need to add shrouds or extra spouts or design special packaging or develop a unique film structure.

Custom Liners



We welcome the opportunity to help solve your unique challenges. Please understand that minimum order quantities will apply and extra time for developing quotations and samples will also be necessary on custom projects. The amount of the minimum order quantity and time required to develop the product will depend on the materials required and the complexity of the construction process.