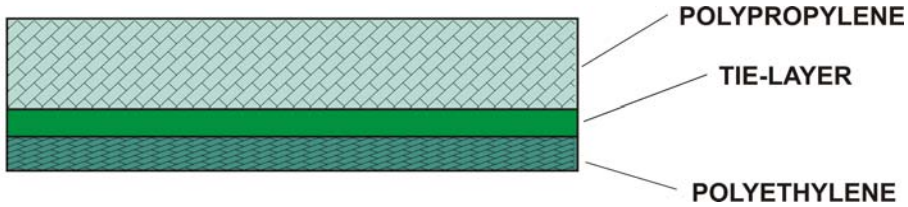
MATERIAL INFORMATION

RIGID PLASTIC MATERIALS – PP/PE

Polypropylene Component	Polypropylene provides an excellent water vapor barrier, good stiffness at low density for high yields and excellent chemical and stress crack resistance. The high-heat deflection temperature of polypropylene makes it a suitable material for hot filling and microwaving.
Polyethylene Component	Polyethylene provides very good moisture barrier properties and very good chemical resistance. The polyethylene layer provides for a wider range of sealing options.
Material Properties	• Low water vapor permeability for product preservation and extending product shelf life • Overall inertness to acids, alkalis, oils, and fats • Good sealing characteristics • Withstands hot fill to 190° F + • Suitable for microwaving with certain food products
Material Applications	• Extended shelf life applications • Aseptic applications • Sensitive products requiring moisture barrier protection but not oxygen barrier protection • Applications with lid materials requiring a wider range of sealing options • Certain food microwaving applications
Lidding Materials	Compatible heat sealable flexible lidding materials providing peelable or welded seals are available. Call Winpak for more information on compatible Winpak flexible lidding materials.



Polypropylene / Polyethylene Coextrusion

About Winpak Rigid Plastic Materials

Winpak offers a variety of rigid plastic material choices to meet today's demanding packaging applications. The company extrudes and thermoforms a variety of monolayer materials as well as a wide variety of coextruded and barrier materials. Rigid plastic materials are available in preformed containers or in rollstock sheet for use on form/fill/seal packaging equipment. Winpak's experienced technical staff is always available to customers with specific packaging material requirements.

Typical Materials

Monolayer Materials

- High Impact Polystyrene
- Polypropylene
- PET

Coextruded/Barrier Materials

- PP/PE
- PP/EVOH/PP
- PS/PE
- PS/PE/PS
- PS/EVOH/PE

This data should be used for typical material properties and not as a specification. This data is offered for informational purposes and does not represent any type of guarantee or warranty of performance. Winpak assumes no responsibility for any incidents that may arise from use of this data. Material suitability for specific packaging applications should be verified prior to selection.

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RIGID PLASTIC BARRIER MATERIALS

About Barrier Materials

Barrier materials use sophisticated coextrusion technologies to bond together layers of high-performance plastic resins. The resulting multilayer materials safeguard products from the effects of oxygen, moisture, and ultra-violet light; depending on specific requirements. These barrier materials can then be used in various practical applications, including keeping food products fresh longer.

Layer by layer… Winpak materials protect and package products.

Typical Barrier Material Applications

- Extended shelf life applications – provide a barrier to the influence of oxygen, moisture, and/or ultra-violet light to extend the shelf life of products.
- Modified atmosphere packaging (MAP) applications – provide a barrier to oxygen and moisture, and ensure the retention of flush gases used in the MAP process to extend the shelf life of refrigerated products.
- Frozen food applications – provide a barrier to moisture to prevent crystallization of the product due to moisture buildup.
- Aseptic applications – provide a barrier to oxygen and moisture to ensure that the product remains sterile without refrigeration throughout the shelf life of the product.
- Other applications – provide a barrier to oxygen, moisture, and/or ultra-violet light for various food, dairy, industrial, and health care products packaged on form/fill/seal packaging equipment.

Rollstock Rigid Plastic Sheet

Preformed Rigid Plastic Containers

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