

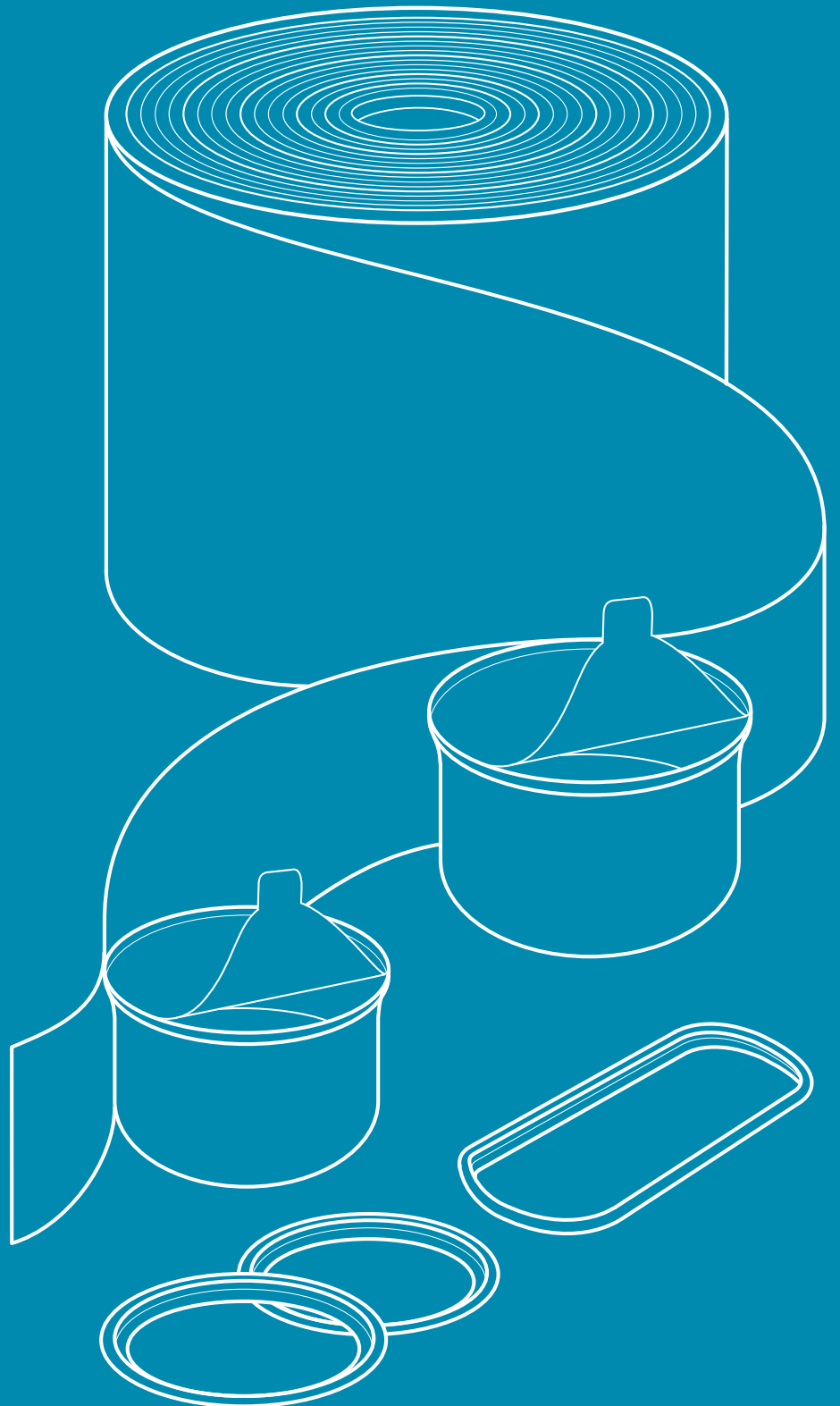
Corus Packaging Plus

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# Protact<sup>®</sup>

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For peel-off end rings



# Protact® for peel-off end rings

## The high performance material for tough retort applications



"Protact in combination with Alcan Packaging's Alufix® Retort membrane provides an outstanding bond to withstand the challenging pressures of continuous retorting while keeping the excellent peel properties"

The modern and fresh appearance of peel-off ends (POEs) conveys a top-of-the-line image. Peel-off ends help build brand differentiation. With printing and embossing, the peel-off end delivers real stand-out on the shelf. This enables brand owners to pursue market growth within the canned food sector.

Protact, with its superb qualities and excellent performance, is the material of choice to meet the high requirements for peel-off end rings. Being suitable for both counterpressure and non-counterpressure continuous retort systems, using Protact opens up a huge variety of markets like vegetables and soup.

Large pressure differences can develop during continuous heat processing of canned foods. Only Protact offers the capability to produce POE rings capable of tolerating these extreme conditions. The secret lies in the combination of the 100% polypropylene coating, which has excellent adhesion with the steel substrate. Furthermore, the elasticity of the polymer on polymer bond with the membrane is only achievable with Protact.

This is confirmed by Alcan Packaging, producer of aluminium membranes. "Protact in combination with Alcan Packaging's Alufix® Retort membrane provides an outstanding bond to withstand the challenging pressures of continuous retorting while keeping the excellent peel properties," comments Andreas Ziegler, responsible for product development.



### Optimised heat-sealing processing

- Wider operating window
- Higher yields
- Increased output
- Higher resistance to variations during sterilisation
- Compatible with modern printed multi-layer membranes

### High performance ends

- Fully retortable
- Superior seal integrity
- Higher level of security
- Excellent food safety
- Consistent ease of opening
- Improved overall pack performance
- Available in a range of colours



### Protact® – a new dimension

peel-off end rings made from Protact add a new dimension to manufacturing convenience.

Protact has a 100% heat seal coating layer of polypropylene of consistent thickness. It is this PP-layer that offers several benefits for manufacturing, processing and the performance of the ends, compared to alternative heat seal options.

As the convenience packaged food market rapidly expands, so does the demand for peel-off ends. Be sure to choose the best material option available for the ring!

Find out how Protact can give you a competitive edge in the fast growing convenience food packaging sector. We will be pleased to talk to you in more detail about all the benefits of Protact.

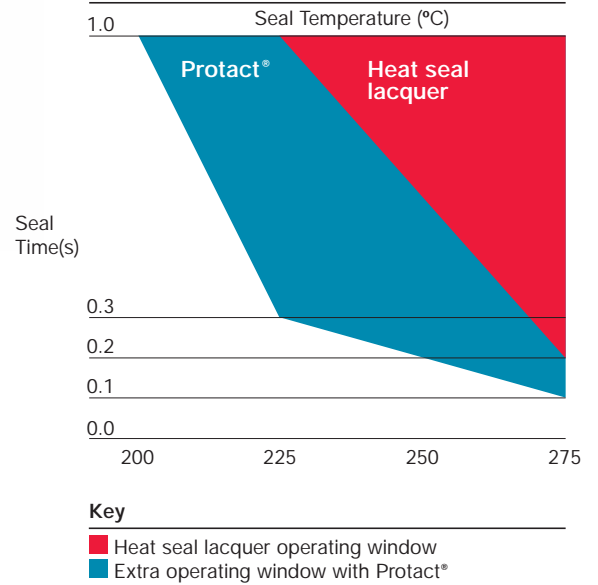
### Recommended specifications Protact® for peel-off end rings

	Range	Properties
<b>Internal coating</b>	PET 15µm clear (Polyethylene Terephthalate)	Chemical resistance Low taint & flavour scalping Excellent moisture barrier
<b>External coating</b>	PP 25µm white, clear, gold (Polypropylene) PP 40µm clear (Polypropylene)	Heat sealable Fully retortable Good chemical resistance
<b>Steel</b>	0.17 – 0.21 mm ECCS/TFS	Other gauges on request

- Our PP coatings are optimised for heat sealability to all commercially available membranes and for double seaming operations.
- The internal PET coating makes Protact a trouble-free, high performance packaging material in contact with food.



Example of Protact® operating window



## Optimised processing

### Wider operating window for heatsealing

During processing the operating window of Protact is much wider than that of heat seal lacquered material. For fixed tool pressure the range of temperatures at which a satisfactory seal is produced using Protact, is significantly wider than lacquered material at all speeds.

This is especially significant at higher speeds where temperatures must be accurately controlled. Protact therefore offers can makers a much more robust processing operation with subsequently much higher yields.

Also the heatsealing time of peel-off membranes to Protact rings can be significantly reduced thanks to the 100% polypropylene coating of Protact. This offers can makers the potential to significantly increase output.

### High resistance to variations during sterilisation

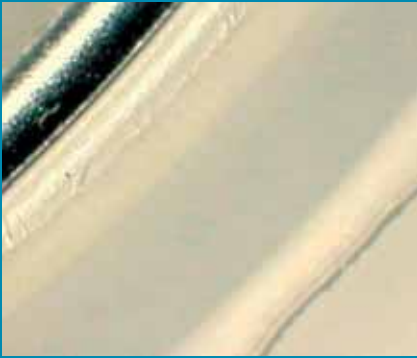
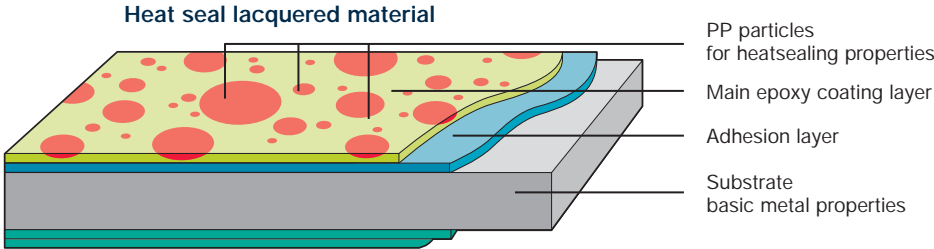
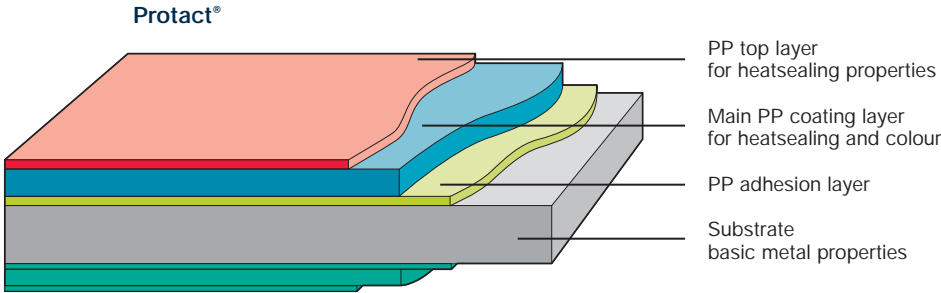
Peel-off ends with a ring made of Protact are more resistant to temperature, time and pressure variations throughout the retort process. This gives fillers and brand-owners an efficient filling process: more filling options, a reduction of operational risks during retorting, a significant reduction of the risk of premature bursting of the seals and thus a lower rejection rate.

### Enables lower cost membrane options

Lower sealing temperatures can be utilised with Protact. Not only does this save energy costs, it potentially also enables the use of modern printed multi-layer membranes.

**Protact® for performance**  
Peel-off ends with a Protact® ring offer the remarkable performance of a unique polypropylene (PP) bonding system:

- Strong – 100% bonding
- Fully retortable
- Superior seal integrity
- Easy opening



Sealed area of Protact ring: no voids due to the 100% polypropylene coating



Sealed area of heat seal lacquered ring: showing voids

**High performance ends**

**Superior seal integrity**

Seal integrity is one of the most important aspects in food packaging. A seal needs to be tight during sterilisation and later on the shelf. A higher level of security is achievable through the use of Protact. Due to the 100% polypropylene bond between Protact and the membrane the seal integrity of Protact is superior to that of heat seal lacquers. When heat seal lacquers are used, the bond is not continuous, as a polypropylene dispersion in epoxy is used to seal to the membrane. With Protact the seal integrity is simply superior, with associated reduced risk of inadequate seals being produced.

**Enhanced corrosion protection with Protact**

The retort curl is effectively protected against corrosion by the combined benefits of Protact. The polymer coating is flexible and formable,

enabling total protection in the critical highly formed curl area.

**Consistent ease of opening**

The superior seal integrity of peel-off ends with a Protact ring does not mean the ends are more difficult to open. On the contrary, the ease of opening is comparable to that of heat seal lacquered rings.

**Excellent food safety**

Protact fully complies with EU and USA food contact legislation. Protact does not contain PVC or Bisphenol-A nor BADGE.

**Improved overall pack performance**

Packs made with peel-off ends utilising Protact exhibit superior seal integrity and therefore inherently offer longer shelf life.

**Colours**

Protact is available in a range of colours including clear, gold and white.

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[www.coruspackaging.com](http://www.coruspackaging.com)

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