

# Stretch Film



## Oriented Film

Product range

### User friendly

Reduce repetitive strain injuries due to light rolls in comparison to regular stretch films. Oriented rolls are shock proof and are damage resistant.

### Wrapping consistency

No compromises on safety and quality. When paired with our OSS solution stability and costs are controlled and film is used until the last metre.

### Cost efficient

The best alternative to manual wrapping. Optimized cost per pallet due to a more controlled wrapping and thin gauge extrusion process.

### 100% recyclable

Our oriented films are 100% recyclable. Packaging waste can be reduced by over 50% in comparison with traditional stretch film wrapping methods.

# Oriented Range Overview

Find the film product code that is right for your application



## MIMALITE Hand Film

MHT

OTCS  
thin core

OTC PCR  
thin core

MHB

## MIMALITE Machine Film

MMT

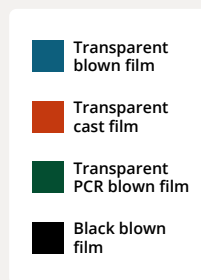
MMT PCR

MMB

## WINRAP Coreless Film

WHTS

WHT



## Reasons why our Oriented Film product range are the key choice for consumers

### Quality & Performance

All our oriented films are designed, produced and delivered with the highest grade of quality control. We make no compromises on safety, traceability and performance. Our quality incidence report was < 0.1% in 2020. We are BRC / IOP, ISO 9001,14001 and 50001 certified.

### Consistency

We are pioneers in developing oriented film and select purposefully, top quality raw materials, sourced in Europe and carefully controlled to perfect our recipes and make your application work flawlessly. Our product range is designed to bring the most consistent results depending of the mechanical properties of the film.

### Producer Expertise

40+ years experience as the stretch film producer in Europe. We are pioneers of producing oriented films both in cast and blown extrusion. We have 3 production facilities located in Belgium and Ireland.

### Research & Development

We are consistently improving our products in order to find better solutions for our customers, we also commit our focus to sustainability, waste reduction and carbon footprint.

### Technical Consultancy & Holistic Approach

We deliver to our customers superior technical support and expertise. Our film specialists provide ad-hoc and on site audits to perfectly match the right film with the right machine and application. We do not only rely on weight or cost, we analyze your whole production and supply chain process, from primary to tertiary packaging and automated storage to provide you the best solution, both in stability and economical performance.

Our laboratory and test centers – unique in Europe – are powerful tools to achieve the best-in-class performance according to your needs.

# Sustainability

How we are making a difference

## Oriented film is fully Recyclable

Oriented film is made with Linear Low Density PolyEthylene (LLDPE) which is 100% recyclable and can be reused for recycled oriented film or numerous applications depending on the purity of the collected material.



## Produced locally in Belgium & Ireland

The raw material that we use for our films is carefully selected and sourced in Europe. Mass balanced, bio based and recycled raw materials in order to reduce environmental impact are our top priorities.



## Technical Consultancy to our Customers

Being closer to our customers and contributing to optimal consumptions is one of our commitments. The best oriented film is the one you don't waste by being overpacked.



## Energy Management

More than 50% of 2021 Capital Investments were Sustainability related projects. As an example, 3600m<sup>2</sup> of solar panels were installed in 2021 for our Virton plant, with an objective of using 40% green energy, to end 2021.



## Internal Recyclability

Our Target is to reuse 100% of internal scrap by 2023 latest. Today our Gorey factory in Ireland is a leader in this commitment with almost 100% of the internal scrap reprocessed and reused in house.



## Quality Performance

We make no compromises on quality with an average return rate of <0.1% in 2021. This prevents multiple trips, unnecessary resources and carbon footprint increase.



WE'LL ALWAYS  
PROTECT IT.

# PCR Oriented Film

The sustainable alternative to fossil fuel based oriented film

**PCR: One of our ways to contribute to a better circular economy**  
Reducing environmental impact through the re-usability of stretch film

## What is Post Consumer Recycled (PCR)?

PCR, is recycled materials collected from industrial waste packaging. In order to produce PCR Resin, waste packaging must be sorted to isolate LLDPE (linear low density polyethylene) and processed through the recycling chain. This includes returns of used oriented film material.

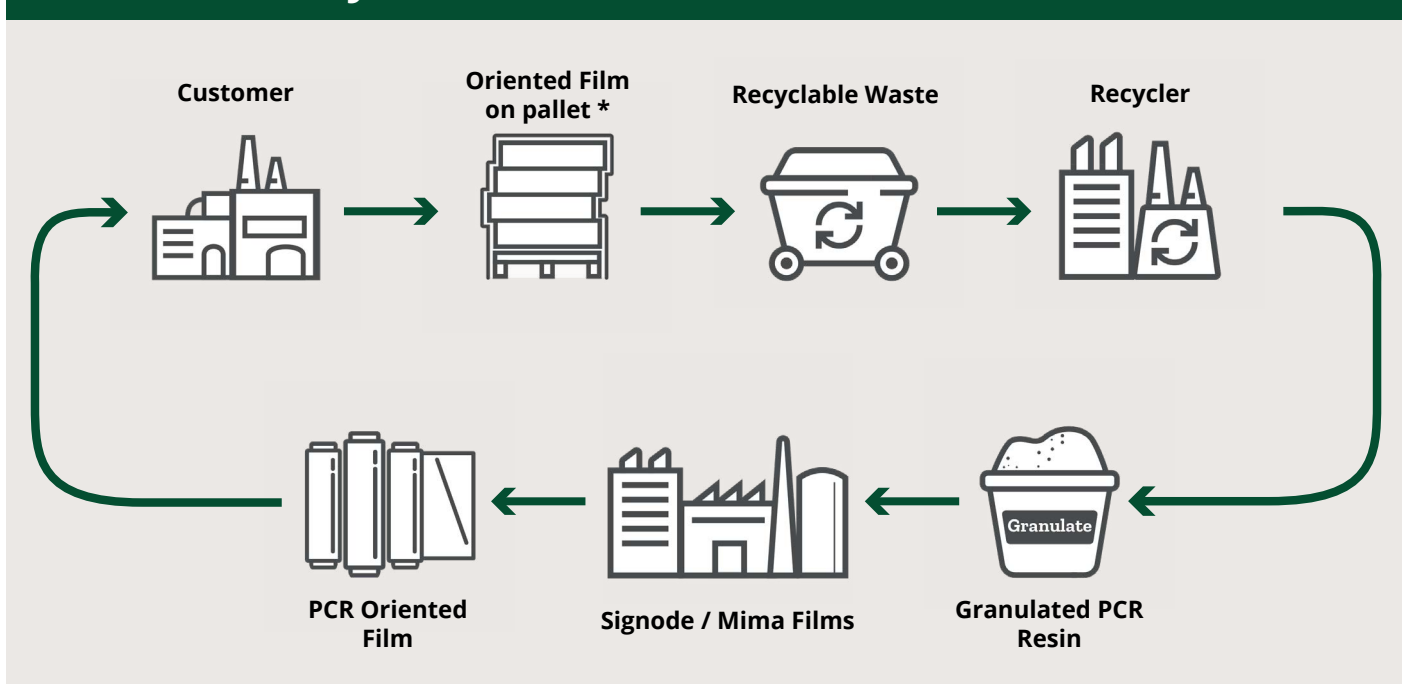
We acquire PCR Resin, from our trusted circular economy partners, with the highest grade of purity to ensure the same mechanical properties as regular stretch film.

## How Does PCR Oriented Film perform?

When it comes to mechanical performance there is no difference between PCR Oriented films and fossil fuel based films. We have invested time and resources in to research and development to create the optimum recipe for the highest quality.

Stretchability of film requires a strong and stable molecular chain to achieve consistent results. By using 30% PCR resin in product composition we ensure a reliable and consistent quality, with the highest performance standards.

## Material Life Cycle of PCR Oriented Film



\* Fossil fuel based and PCR stretch film can be recycled several times in this loop



## Benefits of using PCR oriented films

### Why PCR is the key choice for a more sustainable method of wrapping pallets

#### ■ A More Sustainable Industry

Made with 30% PCR content, recovered from post consumer waste streams. Signode PCR oriented film delivers the same mechanical performance and transportation efficiency as film produced with virgin raw material, maintaining full recyclability.

#### ■ CO2 Reduction

The fossil fueled raw material production process involves numerous steps with high CO2 impact. By recycling used LLDPE you minimize CO2 emissions, in comparison to the production of film, made from virgin raw material. It also prevents the export of plastic waste outside of the EU and it's associated CO2 emissions.

#### ■ Cuts Tax Costs in €'s

The EU plans to raise a tax per ton of non-recycled plastic content. Each metric ton of non-recycled plastic is a loss and potentially a cost, both financially and environmentally. By using PCR oriented film you reduce the volume of non-recycled plastic, minimizing waste & contributing to EU environmental goals.

#### ■ Future Ready

The trajectory of industries is leading towards a more sustainable way of re-using waste packaging. By using Signode PCR oriented film, you contribute to prevent the use of unnecessary resources, involved in the production process of new packaging.



**Granulated PCR Resin**

# MIMALITE PCR Film



Introducing MIMALITE PCR film, an oriented blown machine film containing 30% recycled raw material, designed for semi-automatic machines

Reel & Packaging Specifications	
Product Reference	MMT PCR 07B390
	/4200
Thickness $\mu$	6.6
Film width (mm)	390
Reel length (m)	4200
Cling	Inside
Core weight (kg)	1.153
Reel weight (kg GFN)	11.250
Pallet size	1000 x 1200
Outside diameter (mm)	257
Inside core diameter (mm)	$\geq 76$
Palletization/nr of layers	2
Nr of reels/pallet	36
Pallet gross weight (kg)	405
Pallet net weight (kg)	363

## MMT PCR Film Benefits

- Containing 30% PCR
- Improved load containment
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Less film consumption

## Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	$\pm 3$ mm
Tolerances on weight	$\pm 5$ %
On Reel length	$\pm 5$ %
On Film width	$\pm 4$ mm

Introducing Mimalite PCR Hand Film Thin Core, a blown oriented film containing 30% recycled raw material

Reel & Packaging Specifications	
Product Reference	OTC PCR 390
	/0600
Thickness $\mu$	6.6 $\mu$
Film width (mm)	390
Reel length (m)	600
Cling	Inside
Core weight (kg)	0.180
Reel weight (kg GFN)	1.601
Pallet size	1000 x 1200
Outside diameter (mm)	120
Inside core diameter (mm)	$\geq 50$
Palletization/nr of layers	4
Nr of reels/pallet	360
Pallet gross weight (kg)	576
Pallet net weight (kg)	512

## OTC PCR Film Benefits

- Containing 30% PCR
- Improved load containment
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Less film consumption

## Film Tolerances

Thickness Tolerance	+/- 10%
Core Protrusion	$\pm 3$ mm
Tolerances on weight	$\pm 5$ %
On Reel length	$\pm 5$ %
On Film width	$\pm 4$ mm

# Winrap Coreless Cast



## Introducing Winrap coreless cast, an oriented film for universal applications

### Winrap Coreless Cast Benefits

- No coreless / no core
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Silent unwind

Film Tolerances	
Thickness Tolerance	+/- 10%
Tolerances on weight	± 5 %
On Reel length	± 5 %
On Film width	± 4 mm

Reel & Packaging Specifications					
Product Reference	WHTL3C390	WHTL3C391	WHT09C431	WHT09C431	WHT09C432
	/0800	/0800	/0800	/0800Y	/0600
Thickness $\mu$	7.2 $\mu$	7.2 $\mu$	8.2 $\mu$	8.2 $\mu$	8.2 $\mu$
Film width (mm)	390	390	430	430	430
Reel length (m)	800	800	800	800	600
Cling	Inside	Inside	Inside	Inside	Inside
Reel weight (kg GFN)	2.062	2.062	2.581	2.589	1.936
Pallet size	1000 x 1200	800 x 1200	800 x 1200	800 x 1200	800 x 1200
Outside diameter (mm)	185	185	190	190	175
Palletization/nr of layers	5	5	5	4	5
Nr of reels/pallet	180	120	120	96	150
Pallet gross weight (kg)	371	247	310	249	290
Pallet net weight (kg)	371	247	310	249	290

# Winrap Coreless Blown



Introducing Winrap coreless blown, an oriented machine film specifically designed to provide high load containment on our semi-automatic machines

## MIMALITE Machine Film Benefits

- Improved load containment
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Less film consumption

## Film Tolerances

<b>Thickness Tolerance</b>	+/- 10%
<b>Tolerances on weight</b>	± 5 %
<b>On Reel length</b>	± 5 %
<b>On Film width</b>	± 4 mm

## Reel & Packaging Specifications

Product Reference	WHTCAB390	WHTCAB390	WHTS3B391	WHTS3B390	WHTS3B390
	/0800	/0800Y	/0600L	/0600	/0800
<b>Thickness <math>\mu</math></b>	6.6 $\mu$	6.6	6.6 $\mu$	7.5 $\mu$	7.5 $\mu$
<b>Film width (mm)</b>	390	390	390	390	390
<b>Reel length (m)</b>	800	800	616	600	800
<b>Cling</b>	Inside	Inside	Inside	Inside	Inside
<b>Reel weight (kg GFN)</b>	1.894	1.894	1.459	1.615	2.153
<b>Pallet size</b>	1000 x 1200	1000 x 1200	800 x 1200	1000 x 1200	1000 x 1200
<b>Outside diameter (mm)</b>	185	185	165	165	190
<b>Inside core diameter (mm)</b>	$\geq 76$	$\geq 76$	$\geq 76$	$\geq 76$	$\geq 76$
<b>Palletization/nr of layers</b>	5	4	5	5	5
<b>Nr of reels/pallet</b>	180	144	175	230	180
<b>Pallet gross weight (kg)</b>	341	273	255	371	388
<b>Pallet net weight (kg)</b>	341	273	255	371	388

Product Reference	WHTS3B431	WHTS3B431	WHTS9B390	WHBS3B430
	/0600	/0600Y	/0500	/0500
<b>Thickness <math>\mu</math></b>	7.5 $\mu$	7.5 $\mu$	9 $\mu$	9 $\mu$
<b>Film width (mm)</b>	430	430	390	440
<b>Reel length (m)</b>	600	600	500	500
<b>Cling</b>	Inside	Inside	Inside	Inside
<b>Reel weight (kg GFN)</b>	1.780	1.780	1.615	1.841
<b>Pallet size</b>	800 x 1200	800 x 1200	1000 x 1200	1000 x 1200
<b>Outside diameter (mm)</b>	165	165	165	165
<b>Inside core diameter (mm)</b>	$\geq 76$	$\geq 76$	$\geq 76$	$\geq 76$
<b>Palletization/nr of layers</b>	5	4	5	4
<b>Nr of reels/pallet</b>	175	140	230	168
<b>Pallet gross weight (kg)</b>	312	249	371	309
<b>Pallet net weight (kg)</b>	312	249	371	309



# MIMALITE Hand Film Thin Core



**Introducing Mimalite Hand Film Thin Core, a manual blown oriented film specifically designed to provide high load containment**

## MIMALITE Hand Film Thin Core Benefits

- Improved load containment
- One side cling film
- Low coefficient of friction
- Light paper core
- Less film consumption

## Film Tolerances

<b>Thickness Tolerance</b>	+/- 10%
<b>Core Protrusion</b>	10 ± 3 mm
<b>Tolerances on weight</b>	± 5 %
<b>On Reel length</b>	± 5 %
<b>On Film width</b>	± 4 mm

## Reel & Packaging Specifications

Product Reference	OBCS2B390	OTCS2B390	OTCS2B391	OTCS2B430
	/0600	/0600	/0600	/0600
<b>Thickness <math>\mu</math></b>	6.6 $\mu$	6.6 $\mu$	6.6 $\mu$	6.6 $\mu$
<b>Film width (mm)</b>	390	390	390	430
<b>Reel length (m)</b>	600	600	600	600
<b>Cling</b>	Inside	Inside	Inside	Inside
<b>Core weight (kg)</b>	0.180	0.180	0.180	0.198
<b>Reel weight (kg GFN)</b>	1.601	1.601	1.601	1.765
<b>Pallet size</b>	1000 x 1200	1000 x 1200	800 x 1200	1000 x 1200
<b>Outside diameter (mm)</b>	120	120	120	120
<b>Inside core diameter (mm)</b>	≥ 50	≥ 50	≥ 50	≥ 50
<b>Palletization/nr of layers</b>	4	4	4	4
<b>Nr of reels/pallet</b>	360	360	288	360
<b>Pallet gross weight (kg)</b>	576	576	461	635
<b>Pallet net weight (kg)</b>	512	512	409	564

# MIMALITE Hand Film



**Introducing Mimalite Hand Film, a manual blown oriented film specifically designed to provide high load containment**

## MIMALITE Hand Film Benefits

- Improved load containment
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Less film consumption

## Film Tolerances

<b>Thickness Tolerance</b>	+/- 10%
<b>Core Protrusion</b>	± 3 mm
<b>Tolerances on weight</b>	± 5 %
<b>On Reel length</b>	± 5 %
<b>On Film width</b>	± 4 mm

## Reel & Packaging Specifications

Product Reference	MHT07B390		MHT07B393	MHT09B390	MHT09B393	MHT07B430
	/0600	/0600X	/0600 (Boxed)	/0500	/0300 (Boxed)	/0600
<b>Thickness <math>\mu</math></b>	6.6 $\mu$		6.6 $\mu$	8.6 $\mu$	8.6 $\mu$	6.6 $\mu$
<b>Film width (mm)</b>	390		390	390	390	430
<b>Reel length (m)</b>	600		600	500	300	600
<b>Cling</b>	Inside		Inside	Inside	Inside	Inside
<b>Core weight (kg)</b>	0.4	0.48	0.4	0.4	0.4	0.45
<b>Reel weight (kg GFN)</b>	1.839	1.919	1.839	1.966	1.340	2.040
<b>Pallet size</b>	1000 x 1200	1000 x 1200	800 x 1200	1000 x 1200	800 x 1200	1000 x 1200
<b>Outside diameter (mm)</b>	113	106	113	113	100	113
<b>Inside core diameter (mm)</b>	$\geq 50$	$\geq 38.2$	$\geq 50$	$\geq 50$	$\geq 50$	$\geq 50$
<b>Palletization/nr of layers</b>	4	2	2	4	2	3
<b>Nr of reels/pallet</b>	400	210	120	400	132	300
<b>Pallet gross weight (kg)</b>	753	419	254	802	208	628
<b>Pallet net weight (kg)</b>	736	403	221	786	177	612

Product Reference	MHT07B431	MHB09B430	MHB09B433	MHT09B433
	/0600	/0500	/0500 (Boxed)	/0500 (Boxed)
<b>Thickness <math>\mu</math></b>	6.6 $\mu$	8.6 $\mu$	8.6 $\mu$	8.6 $\mu$
<b>Film width (mm)</b>	430	430	430	430
<b>Reel length (m)</b>	600	500	500	600
<b>Cling</b>	Inside	Inside	Inside	Inside
<b>Core weight (kg)</b>	0.45	0.45	0.45	0.45
<b>Reel weight (kg GFN)</b>	2.04	2.194	2.194	2.175
<b>Pallet size</b>	800 x 1200	1000 x 1200	800 x 1200	800 x 1200
<b>Outside diameter (mm)</b>	113	113	113	113
<b>Inside core diameter (mm)</b>	$\geq 50$	$\geq 50$	$\geq 50$	$\geq 50$
<b>Palletization/nr of layers</b>	2	3	2	2
<b>Nr of reels/pallet</b>	160	300	120	120
<b>Pallet gross weight (kg)</b>	350	674	300	296
<b>Pallet net weight (kg)</b>	326	658	263	261

# MIMALITE Machine Film



**Introducing MIMALITE machine film, an oriented blown machine film specifically designed to provide high load containment on semi-automatic machines**

## MIMALITE Machine Film Benefits

- Improved load containment
- One side cling film
- Low coefficient of friction
- Good clarity and optics
- Less film consumption

## Film Tolerances

<b>Thickness Tolerance</b>	+/- 10%
<b>Core Protrusion</b>	± 3 mm
<b>Tolerances on weight</b>	± 5 %
<b>On Reel length</b>	± 5 %
<b>On Film width</b>	± 4 mm

## Reel & Packaging Specifications

Product Reference	MMT07B390	MMT07B390	MMT07B391	MMT09B390	MMT09B391
	/2100	/4200	/4200	/3250	/3250
<b>Thickness <math>\mu</math></b>	6.6 $\mu$	6.6	6.6 $\mu$	8.6 $\mu$	8.6 $\mu$
<b>Film width (mm)</b>	390	390	390	390	390
<b>Reel length (m)</b>	2100	4200	4200	3250	3250
<b>Cling</b>	Inside	Inside	Inside	Inside	Inside
<b>Core weight (kg)</b>	1.153	1.153	1.153	1.153	1.153
<b>Reel weight (kg GFN)</b>	6.202	11.250	11.250	11.181	11.181
<b>Pallet size</b>	1000 x 1200	1000 x 1200	800 x 1200	1000 x 1200	800 x 1200
<b>Outside diameter (mm)</b>	195	257	257	257	257
<b>Inside core diameter (mm)</b>	≥ 76	≥ 76	≥ 76	≥ 76	≥ 76
<b>Palletization/nr of layers</b>	2	2	2	2	2
<b>Nr of reels/pallet</b>	60	36	26	36	26
<b>Pallet gross weight (kg)</b>	372	405	292	403	291
<b>Pallet net weight (kg)</b>	303	363	263	361	261

Product Reference	MMT07B440	MMT07B441	MMB09B441	MMT09B440	MMT09B441
	/4200	/4200	/3250	/3250	/3250
<b>Thickness <math>\mu</math></b>	6.6 $\mu$	6.6 $\mu$	8.6 $\mu$	8.6 $\mu$	8.6 $\mu$
<b>Film width (mm)</b>	440	440	440	440	440
<b>Reel length (m)</b>	4200	4200	3250	3250	3250
<b>Cling</b>	Inside	Inside	Inside	Inside	Inside
<b>Core weight (kg)</b>	1.250	1.250	1.250	1.250	1.250
<b>Reel weight (kg GFN)</b>	12.630	12.630	12.847	12.564	12.564
<b>Pallet size</b>	1000 x 1200	800 x 1200	800 x 1200	1000 x 1200	800 x 1200
<b>Outside diameter (mm)</b>	257	257	257	257	257
<b>Inside core diameter (mm)</b>	≥ 76	≥ 76	≥ 76	≥ 76	≥ 76
<b>Palletization/nr of layers</b>	2	2	2	2	2
<b>Nr of reels/pallet</b>	36	26	26	36	26
<b>Pallet gross weight (kg)</b>	455	328	334	452	327
<b>Pallet net weight (kg)</b>	410	296	302	407	294

Sources:  
Signode Europe Outside-In Customer Study  
conducted 2020



# WE'LL PROTECT IT FROM HERE.

**Signode is the multi-billion-dollar global Transit Packaging Division of Crown Holdings, with 80 manufacturing facilities, 33 within Europe where we have over 2000 employees. The breadth and depth of Signode's experience and product portfolio allows the company to offer the resources, reach, and vision to provide transit packaging solutions, from the smallest to largest of customers.**