

DOWLEX™, DOWLEX™ GM and ELITE™ Polyethylene Resins

## How can we do more with less?

### Our rich portfolio of polyethylene options can enable more sustainable breathable backsheets that are thinner, lighter and custom-tailored

The downgauging of film plays an important role in the development of sustainable breathable backsheets. Maintaining strength, however, is equally important.

Our broad portfolio of advanced materials – including DOWLEX™, DOWLEX™ GM and ELITE™ Polyethylene Resins – can help produce thinner, lighter breathable film structures that maintain excellent mechanical properties and minimize defects in backsheets for:

- Baby diapers
- Feminine hygiene pads
- Adult incontinence products

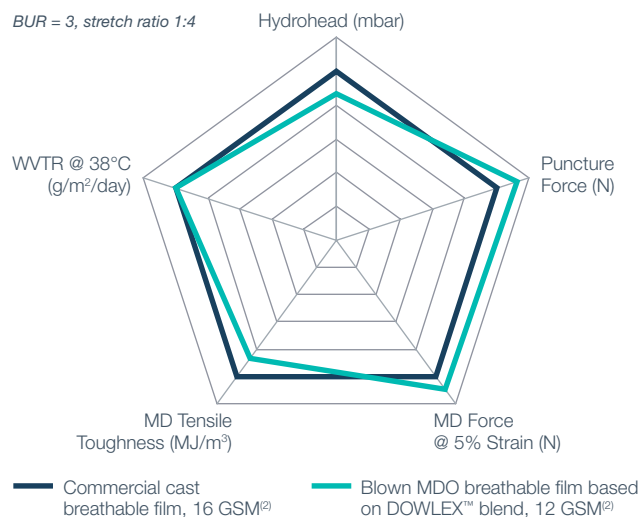
### Downgauging plus

These proven solutions also enable custom-tailored formulations that address specific application needs in a wide range of processing technologies, such as blown and cast films.

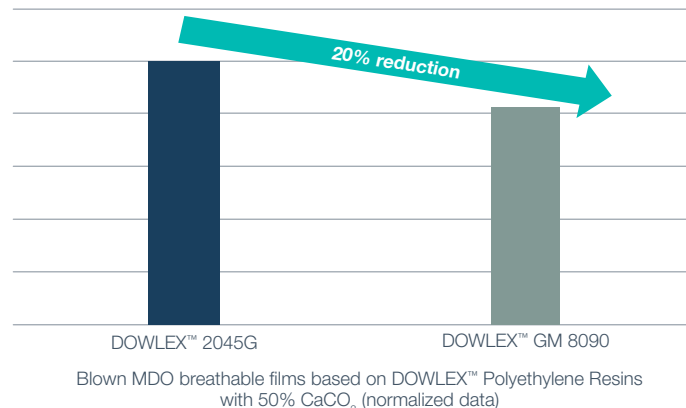
Figure 1 shows how blown machine direction oriented (MDO) film formulated with DOWLEX™ Polyethylene Resins can help produce downgauged breathable films that maintain very competitive product performance.

Our versatile portfolio can also enable homogeneous stretching of both blown and cast films at low stretch ratios (Figures 2 and 3), helping to offer more balanced CD/MD properties.

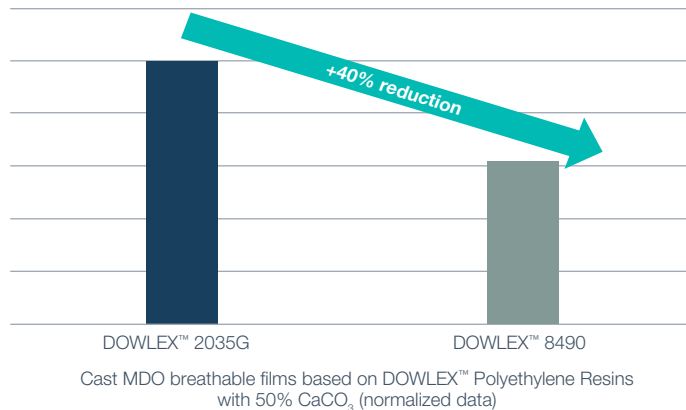
**Figure 1:** Blown MDO formulation based on DOWLEX™ 2042EC and DOWLEX™ 2045G<sup>(1)</sup>



**Figure 2:** Minimum stretch ratio required to obtain homogenous stretched film in blown MDO process<sup>(1)</sup>



**Figure 3:** Minimum stretch ratio required to obtain homogenous stretched film in cast MDO process<sup>(1)</sup>



<sup>(1)</sup>Typical values, not to be construed as specifications. Users should confirm results by their own tests.

<sup>(2)</sup>GSM = grams per square meter

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## Committed to innovation

As an established global leader in the healthcare and hygiene industry, we're strongly aligned with current and future industry trends. Our dedicated innovation capabilities and relationships throughout the value chain are helping raise the bar for performance, processability and sustainability in hygiene absorbent products.

## A robust portfolio

Our materials for hygiene films are designed to address the demands of these highly specialized applications, including but not limited to:

- Enhanced stiffness
- Desirable puncture resistance
- Lower shrinkage
- Broad processing windows

Tables 1 and 2 list key products that are well suited for developing thin, strong and breathable blown and cast film formulations for more sustainable backsheets. If you don't see what you're looking for here, please feel free to ask. We're always ready to innovate... and collaborate!

**Table 1:** Breathable backsheet product offering for blown film processing technology<sup>(1)</sup>

Product	Density (g/cc)	Melt Index (dg/min)	Key Benefits
DOWLEX™ 2045G Linear Low Density Polyethylene (LLDPE) Resin	0.920	1.0	Optimized stiffness/toughness balance for downgauging
DOWLEX™ 2042EC LLDPE Resin	0.930	1.0	
DOWLEX™ GM 8090 LLDPE Resin	0.916	1.0	Broad stretching window for balanced CD/MD properties

**Table 2:** Breathable backsheet product offering for cast film processing technology<sup>(1)</sup>

Product	Density (g/cc)	Melt Index (dg/min)	Key Benefits
DOWLEX™ 2107GC LLDPE Resin	0.918	2.3	Optimized stiffness/toughness balance for downgauging
ELITE™ 5230GC Enhanced Polyethylene (EPE) Resin	0.916	4.0	
DOWLEX™ SC 2108G LLDPE Resin	0.935	2.7	
DOWLEX™ 2035G LLDPE Resin	0.919	6.0	Excellent processability for CaCO <sub>3</sub> incorporation
DOWLEX™ GM 8490 LLDPE Resin	0.918	3.5	Broad stretching window for balanced CD/MD properties

<sup>(1)</sup>These are typical properties, not to be construed as specifications.



## Better together

Our deep understanding of material science, strong product portfolio and sharp focus on innovation allow us to team up with customers to develop the best possible answers for specific application needs.

We're constantly working to improve. To enable better, more sustainable films with thinner, lighter mono-material solutions; more recyclable designs; reduced waste and improved recycling streams. We're also investing in bio-based feedstocks and exploring other technological breakthroughs.

We're excited about the future of hygiene products and would love to learn more about your backsheet film challenges. Please visit [dow.com](http://dow.com) or contact your Dow representative to get the conversation started.

**Dowlex**  
polyethylene resins by **Dow**

**Elite**  
enhanced polyethylene resins by **Dow**

**Dowlex GM**  
polyethylene resins by **Dow**

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