

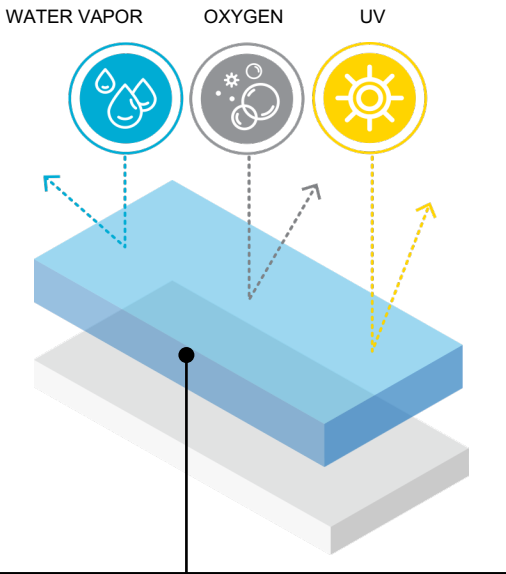


Ergis ultra barrier film  
**noDiffusion<sup>®</sup>**

*innovation in encapsulation*

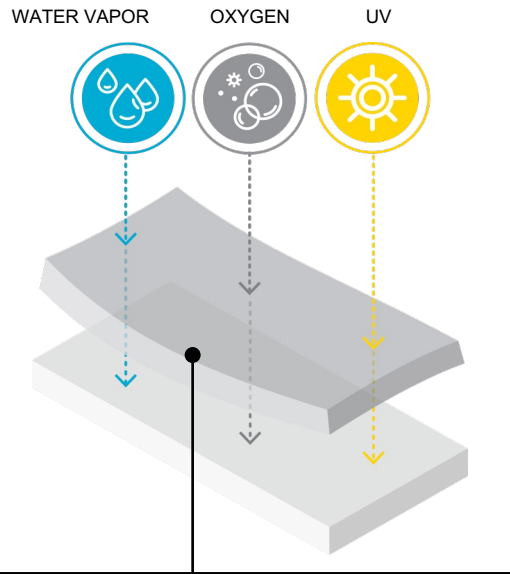
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**A CURRENT ELECTRONICS MARKET TREND** is the fabrication of various flexible electronic devices (like flexible displays and solar cells), that require a flexible substrate material.



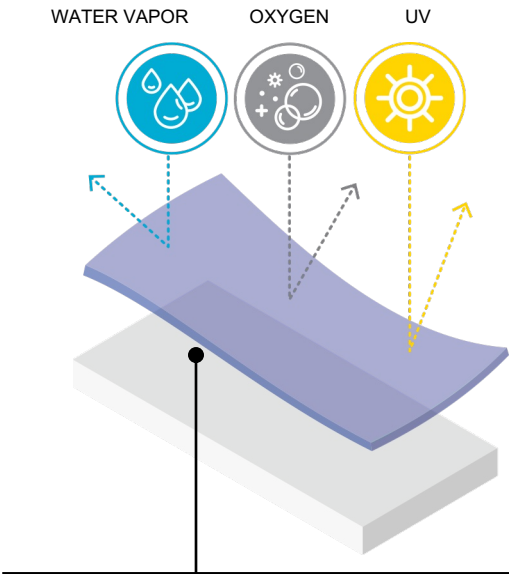
GLASS BARRIER

- NOT FLEXIBLE
- EXCELLENT BARRIER



FLEXIBLE POLYMER

- FLEXIBLE
- WEAK BARRIER



INORGANIC, GLASS-LIKE LAYER  
**ERGIS NODIFFUSION®**

- EXCELLENT FLEXIBILITY
- EXCELLENT BARRIER



**CAGR > 10%**

**FLEXIBLE ELECTRONICS IS  
ONE OF THE FASTEST GROWING  
MARKETS**

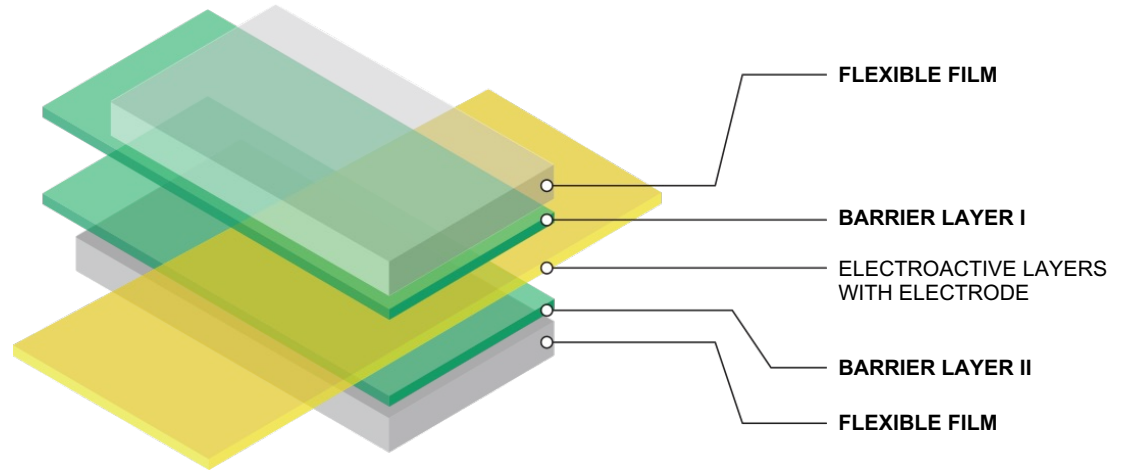
**SUBSTRATE AND ENCAPSULATION** are among the most significant deterrents due to their relatively high price, and many kinds of devices don't reach the market because they have to compete with traditional devices like glass-based OLEDs, Si-based rigid photovoltaics and many other types of devices, and the added production costs are too

high even when the higher functionality is considered. Thus, lowering the manufacturing costs of flexible devices can lead to more feasible commercialization.

## ERGIS noDIFFUSION® FILMS ARE

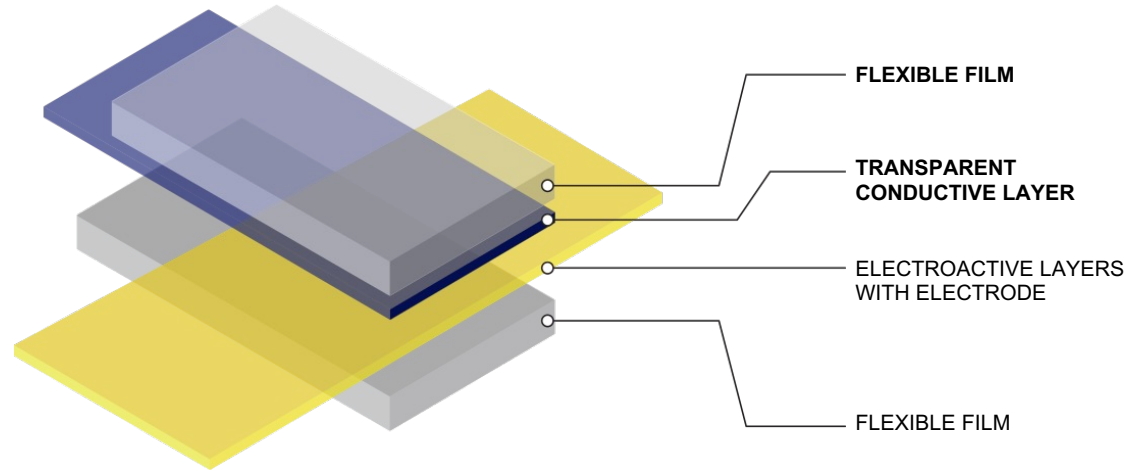


# ERGIS noDIFFUSION® BARRIER FILMS



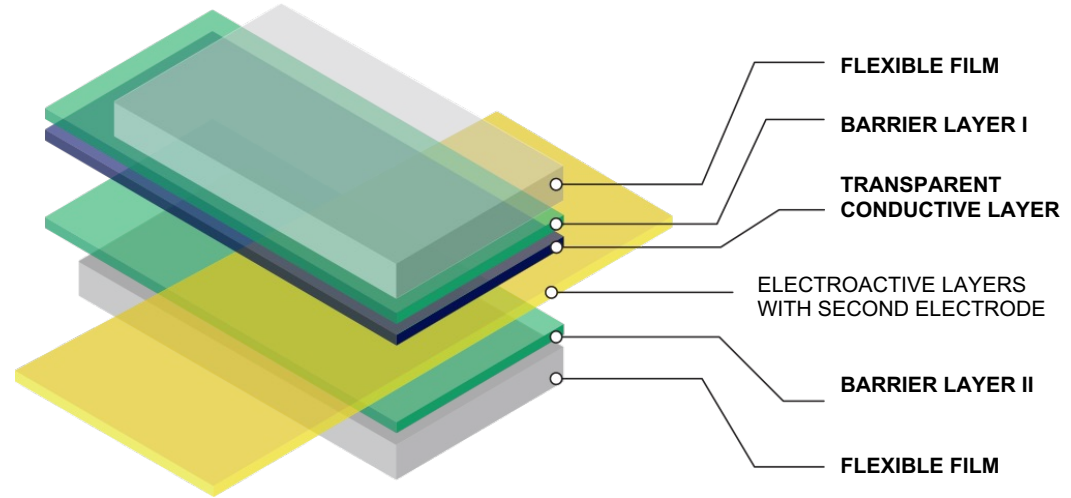
<b>Substrate</b>	PET, PMMA
<b>Water Vapor Transmission Rate (WVTR)</b>	$10^{-6}$ g/m <sup>2</sup> 24h
<b>Oxygen Transmission Rate (OTR)</b>	$10^{-4}$ cm <sup>3</sup> /m <sup>2</sup> 24h
<b>Film Thickness</b>	12-150 μm
<b>Transmittance</b>	> 90% in the visible range
<b>Other properties</b>	Weather resistant, UV stable

# ERGIS noDIFFUSION® BARRIER FILMS



<b>Substrate</b>	PET, PMMA
<b>Surface conductivity</b>	15 ohm/square
<b>Film Thickness</b>	12-150 µm
<b>Transmittance</b>	> 80% in the visible range
<b>Other properties</b>	Weather resistant, UV stable

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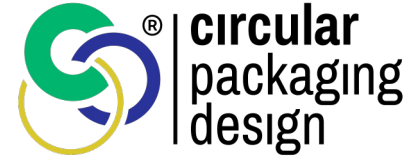
**Ergis noDiffusion®** film technology is being developed by the **ERGIS GROUP** in co-operation with its partners.



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The **ERGIS Group**, which has been developed consistently since 1998, is a leader in plastics processing in Central and Eastern Europe. The Group consists of modern and innovative companies, which makes it an example of a dynamic enterprise with a stable market position. Our organisational culture is based on: expansion, sustainable development and innovativeness.

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**CIRCULAR PACKAGING DESIGN** was established in January 2018 as part of Ergis Group when the EU announced its new Strategy for Plastic. Its main objective is design and production implementation of packaging complying with Circular Economy requirements.

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# Ergis ultra barrier film noDiffusion<sup>®</sup>

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

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