



**PROTĒAN**<sup>®</sup>  
OGR Barrier



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The PROTĒAN<sup>®</sup> OGR Barrier platform provides options for the pulp, paper and packaging industries to replace environmentally persistent oil and grease resistant barriers, such as fluorochemicals and extruded polyethylene. Unlike existing fluorine-free alternatives, the proprietary formulas are versatile and can be tailored to achieve a full range of 3M kit values, depending on the performance and environmental profile targets of the application.

The solutions are efficient and cost-effective alternatives for manufacturers looking to support their sustainability claims. HSMG<sup>®</sup> has acquired significant expertise related to the use of PROTĒAN and will work with clients to tailor coating formulations to address a full range of barrier requirements.

### When compared to legacy technologies, PROTĒAN OGR Barrier can offer the following benefits:

#### SUSTAINABILITY:

- Recyclable
- Biodegradable and compostable options available
- Free of fluorocarbons, wax and silicone
- Does not require special conditions for end of life disposal
- Paper is repulpable

#### MANUFACTURING EFFICIENCY:

- Scalable and adaptable using existing mill equipment
- Can be applied using size press, rod or blade coating equipment
- Offers a smooth surface for graphics and printing
- Maintains fiber flexibility for converting

#### VERSATILITY:

- Compatible with other barrier systems such as water-resistance, oxygen, water vapor
- Available in a full spectrum of 3M kit values (3-12)
- Suitable for hot or cold products
- OGR alternative for various paper grades, bleached or unbleached
- Suitable as an emulsion for other coating agents
- Available as a full or a spot application
- Will also provide moderate levels of water-resistance

#### SAFETY:

- FDA approved under 21 CFR 175 - 186
- Meets specifications described in Generally Recognized as Safe (GRAS) notice GRN 514
- Can be formulated to meet ASTM requirements
- BFR XXXVI & XXXVI/2
- Fulfills requirements for ASTM 6400 and 6868; CAN/BNQ 0017-088; ISO 17088 and 16929; and EN 13432
- Non-toxic
- No fluorocarbons

### PROTĒAN OGR Barrier can be used for several paper and paperboard applications including:



#### BAKERY WRAPS

Our fluorine-free coating provides superior grease-resistance while keeping the contents fresh. The finished product remains flexible for converting and is designed for high-quality printing.



#### HOT & COLD FOOD CONTAINERS

Our fluorine-free solutions cover a full spectrum of the 3M kit range. These coated containers can be easily converted, offer superior performance and high quality printing.



#### FORMED FIBER

Disposable fiber-based products with increased OGR performance using a fluorine-free alternative that covers a full spectrum of the 3M kit range.



#### OGR FOOD BOARD

OGR paperboard coated with a fluorine-free alternative formulations that cover a full spectrum of the 3M kit range.



#### OGR PAPER

These fluorine-free formulations can be used to create OGR paper that can replace all paper products used by the fast food industry. The finished products are designed for high-quality printing and are durable.

Contact HSMG<sup>®</sup> to learn more about PROTĒAN<sup>®</sup> OGR Barrier