

IMERYS... making packaging more sustainable

FORMULATION SERVICES



IMERYS
Kaolin



IMERYS Formulation Services

IMERYS Formulation Services was established to develop ready made innovative coatings and service solutions that add barrier, functional and/or aesthetic features to packaging. The focus being on formulations that provide different environmentally friendly solutions compared to the current alternatives.

KEY FEATURES OF PRODUCT OFFER:

Water-based

Ready-to-use

Recyclable, repulpable &
compostable

Ease & safety of use

Coater or press applied

FDA/BfR compliant
for food contact

Oil & Grease Barrier

Functional barrier against ingress of oil & grease. Allows for a cost-effective substitution of PE lamination or wax coatings or fluorochemical treatments.

Features

- Glueable with both hot melt and cold set adhesives
- Can combine properties of release & moisture barrier as required
- FDA/BfR compliant for food contact
- Can be applied using conventional coating equipment, or via flexo or roto press

Performance

Puddle Size Press => 4 to 7 KIT

Metered Size Press, Blade & Rod Coaters, Flexo printers => 10 - 12 KIT

Applications

Burger wraps, pizza boxes, bakery products, dairy products, pet food, consumer goods, etc.
Solution available for creased/folded applications.

Moisture Vapor Barrier

Functional barrier against ingress of moisture vapor. Allows for a cost-effective substitution of PE lamination.

Features

- Glueable with both hot melt and cold set adhesives
- Can combine properties of release & grease barrier as required
- FDA/BfR compliant for food contact
- Can be applied using conventional coating equipment, or via flexo or roto press

Performance

Moderate to high barrier performance formulations available with MVTR of < 60 g/m²/day
jungle conditions (38°C & 90% humidity) on paperboard

Applications

Roll wrap, ream wrap, frozen food, chilled food, dry food, bread wrap, produce and poultry packaging, corrosion sensitive consumer products

KEY FEATURES OF SERVICE OFFER:

Custom fine-tuning to meet
your specific requirements

Implementation support

Customer service based on
IMERYS' global production
and logistics network

Barrier against Mineral Oil Migration

Functional back-side barrier on board against migration of mineral oil to packaged food

Features

- Can be used for board based on virgin and recycled fibers
- Glueable with both hot melt and cold set adhesives
- FDA/BfR compliant for food contact
- Can be applied using dispersion coating techniques, or via flexo or roto press

Performance

Non-detect levels of migration of aliphatic and aromatic mineral oil components from base substrate

Applications

All primary & secondary fiber-based packaging for food products

Primer for Coated Board and Paper

Base coat primer for optimized surface porosity/holdout with the opportunity to reduce total cost of the coated system

Features

- Allows for better dry pick strength
- Allows to reduce binder usage levels
- Allows to reduce coatweight of mid and top layers

Performance

Overall cost reduction for coating of final double or triple coated board (or paper) while achieving similar smoothness and significantly better gloss

Applications

All double and triple coated board and paper applications

BARRIKOTE™

Water based barrier coatings



Bakery/Bread Bags

- Papers with a thin layered water based barrier coating have improved printability especially compared to waxed products.
- Our barrier solution can be regulated, (by varying the coat weight), to enable the bread to breath at the required rate to extend shelf life and maintain freshness.
- Imerys' solution is a press applied WBBC that enables flexibility to convert any bread pouch according to the specific needs of the bread.
- By using our water based barrier coating the bread bags are recyclable.

In addition to BARRISURF™ hyper-platy kaolins, IMERYS is now offering the BARRIKOTE™ line of fully formulated coatings for use in various packaging applications. These newly designed coatings reduce the use of plastics and oil based materials and improve the sustainability of the overall package.

- BARRIKOTE™ coatings are sustainable, recyclable systems that can replace fluorochemicals, wax and polyethylene in applications that require the following barrier performance criteria :
 - Grease
 - Water
 - Moisture
- BARRIKOTE™ coatings are user friendly and can be applied using a variety of applicators:

Conventional applicators

- Rod
- Blade
- MSP
- Curtain
- Airknife

Press Applied Applicators

- Gravure
- Flexo

