



# FibraLAST® PC-220 Non-fluorinated Barrier Technology

Additive for paper and paperboard products

AGC Chemicals Americas, Inc.



Your Dreams, Our Challenge



# Our Mission

We're committed to supplying our customers high-performance material solutions through our motivated employees, innovative technologies and responsiveness.

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# New Non-fluorinated Barrier Technology



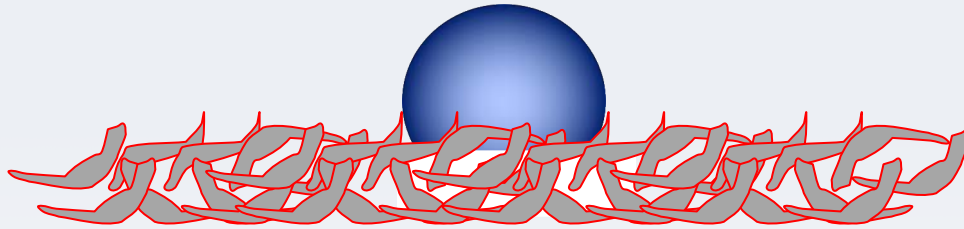
## FibraLAST®

Designed as an environmentally friendly alternative to traditional oil sizing product grades as non-fluorinated sizing additives to protect paper products from both water and food oils.

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# New Non-fluorinated Barrier Technology

Fluorinated



- Coats individual fibers
- Low surface energy of the fibers prevents penetration by higher surface tension liquids

vs. Non-fluorinated FibraLAST



- Coats fibers and fills pores in fiber network
- A single wet-end additive repels both water and oil
- Unique combination of chemical and physical barrier
- Liquids face a tortuous path to penetrate fiber network

# Applications for FibraLAST Additives

- Molded, formed fiber, and cardboard products
- Fast-casual bowls, plates, containers, pizza boxes



# Approved for Food Contact

- FDA compliant for contact with food of all types, with the following limitations:
  1. Maximum loading of 20% active content by weight of oven-dried pulp
  2. Apply prior to sheet forming
  3. Use in accordance with current good manufacturing practice
- Kosher approval pending



# Benefits for Paper and Molded Fiber Products

- Repels water
- Provides a barrier against food oils and greases
- Prevents bleed-through of high-temperature liquids and oils
- - 80°C water and oil holdout performance
- Patent pending technology
- Made in the U.S.A.

# Environmental Benefits

- Non-fluorinated
- No silicones
- No heavy metals
- Plant derived components

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# Processing with FibraLAST

- Applied to the paper pulp itself
- Designed for wet end processes
- No additional equipment or process required since additives are applied to the pulp before fabrication

# FibraLAST Certification Status

Certification	Status
FDA Food Contact	✓
BfR Compliant	In progress
BPI Certified Compostable	In progress
Kosher	In progress*
Kosher certification of manufacturing facility	In progress
on DSL	✓
ChemForward or GreenScreen inventories	Being considered

\*raw materials are not animal sourced

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# TAPPI Holdout Performance Test Results

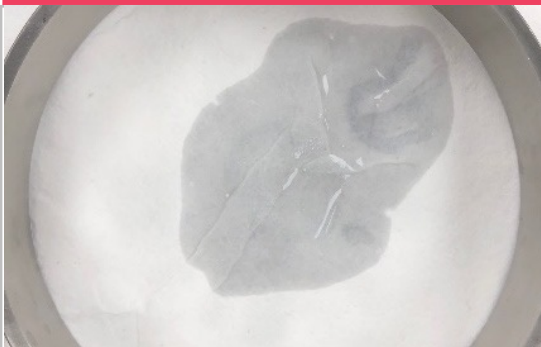


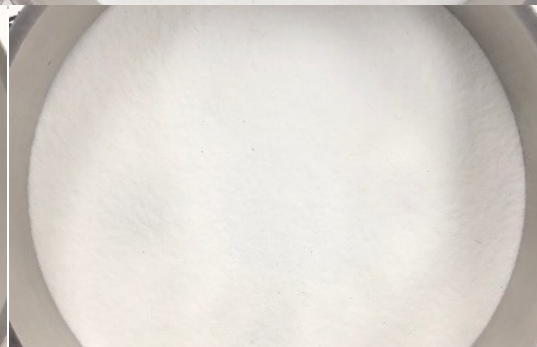
80 °C Mazola® corn oil for 2 hours

300 gsm	untreated	PC-200 5% dry/OD
top		
bottom		
TAPPI kit score	0	4



# TAPPI Holdout Performance Test Results

90 °C tap water

300 gsm	untreated	PC-200 5% dry/OD
top		
bottom		
Cobb 120 (gsm)	440.7	22.6

\*No AKD or ASA needed

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# FibraLAST Now Available



- Currently in scale-up
- Will be manufactured in the United States
- Available in all regions

**Learn more**

**[www.agcchem.com](http://www.agcchem.com)**

**610-423-4300 800-424-7833**

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