Application Profile

Food Processing



Peanut Butter, Egg Whites Clean Easily From Surfaces of Teflon®

To demonstrate how rapidly sticky food substances can be flushed from nonstick surfaces of DuPontTM Teflon[®] PFA fluoropolymer resin, DuPont researchers smeared peanut butter and egg white on test plates made of the material. The plates were then placed under free-running hot tap water (85 to 92°C).

Peanut butter tests

Researchers applied fresh samples of low-fat and regular peanut butter at varying thicknesses across separate plates for each, creating heavy to light density areas.

Results. Within 45 seconds after being placed under the water tap, plates loaded with both kinds of peanut butter appeared completely free of residue. Closer inspection showed a slight film residue, so rinsing was continued for an additional 2 minutes. A lens tissue was then used to wipe the surface to detect any remaining residue. None was found. Both peanut butter formulations were tested five times in this manner with identical results.

When the same tests were conducted using stainless steel plates, residue remained after a prolonged period under the hot water tap.

Egg white tests

Unadulterated egg whites and a bubble-free blend of egg whites with distilled water were applied to separate sets of test plates. They were then aged for 5 minutes.

Results. When placed under the water tap, both the plain and water-blended egg whites washed away almost immediately. No residue was detectable to the naked eye.



In peanut butter testing, Teflon® PFA comes clean

Additional samples were allowed to dry on the test plates for 48 hours. The dried egg whites also washed away almost immediately with no detectable residue.

Benefits for Food Processors

Cuts downtime for cleaning. Process equipment surfaces of Teflon[®] remain cleaner longer, and even the stickiest substances clean fast and easy. Teflon[®] PFA also withstands steam-cleaning temperatures and pressures.

Allows visual checks. Because tubing made of Teflon[®] PFA is translucent, operators can see whether food residue has been removed during cleaning.

Safeguards product purity. Teflon® PFA is chemically inert and pure. Protection against contamination is yet another reason why biomedical, pharmaceutical and food manufacturers prefer it to stainless steel for process equipment components such as tubing, pipe, fittings or linings.





... but stainless steel retains a residue.

For More Information...

We'd be happy to provide you with more detailed information on DuPont Teflon[®] for food processing applications. In the U.S., call (302) 999-3543. In other countries, contact your local representative or the nearest DuPont location listed on the back.

www.teflon.com

