
What Does “Flushable” Really Mean?

By [Cynthia Finley December 3, 2014 6:19 pm](#)



Utilities across the country are delivering the “3 Ps” message to their customers, asking them to **flush only the 3 Ps – pee, poop, and toilet paper**. But since many manufacturers and retailers label some wipes and other products “flushable,” NACWA and its utility members are often asked if other products could be safe to flush, and what criteria these products would need to meet to call themselves flushable.

There are no clear answers to these questions yet, but the wastewater industry will be working with the nonwoven fabrics industry starting next year, with the goal of completing new flushability guidelines expected in mid-2016. There is also an International Organization for Standardization (ISO) workgroup that is currently developing technical specifications for flushable products (see this news [article](#) for more information about the ISO workgroup). The workgroup began earlier this year, and the standards development is expected to take two to three years.

In the meantime, wastewater utility staff have been evaluating how they would like to see “flushable” defined. The wastewater industry has long considered toilet paper as the benchmark for any product that is labeled as “flushable,” since toilet paper is flushed constantly and utilities do not see it causing pump clogs. Here are the reasons toilet paper is okay to flush:

- It rapidly loses strength when it gets wet.
- It often breaks into pieces during the flushing action of a toilet.
- It continues to break into pieces or fibers in the conditions normally anticipated in a typical wastewater collection system.
- It does not require the force of a mechanical device to break it into pieces.
- It has short fiber lengths that are unlikely to re-rope or entangle with other materials.
- It does not cause problems in sewers, septic systems, or treatment facilities.
- It is biodegradable and will not reduce the quality of biosolids.

These qualitative properties of toilet paper should apply to any product that calls itself “flushable.” The challenge now is to define these properties quantitatively. Wastewater experts have been considering both the product properties needed to protect treatment plants, pumps and other equipment, and biosolids quality. Potential characteristics for wipes and any other product labeled “flushable” include the following:

- Like toilet paper, the product loses strength rapidly when flushed.
- The product breaks into pieces in a short period of time under conditions anticipated in a normal wastewater collection or septic system and without the aid of a mechanical device, such as a pump or grinder.
 - The pieces that the product breaks into should be one inch or less in any dimension, since pieces this size typically do not cause problems for pumps and other equipment.
 - The optimum time period for breaking down is still being determined, but it is clear that it needs to be less than 60 minutes since a wipe could reach a pump in that period of time. Some toilets may only be 10 minutes or less from the pump or septic system. Additional work is needed to determine if a shorter time period is required for typical collection systems.
- The product is made of 100% biodegradable fibers, to prevent microscopic or larger pieces from appearing in effluent or biosolids.
- The product is not buoyant.

If all of these criteria can be defined quantitatively and proven through standardized test procedures, then a product could be labeled “flushable” and should be safe for normal collection systems and treatment plants. Since there are currently no regulations about labeling a product “flushable,” manufacturers and retailers will need to step up and ensure that only products meeting the criteria are labeled “flushable.” Products that do not meet the criteria, but that people might be tempted to flush (such as cleaning wipes, paper towels, and feminine hygiene products) should have a prominent “do not flush” logo on the packaging. An example of a clear logo on the top of a package, where the consumer is likely to see it, is on Kirkland brand baby wipes:



Until all of these things happen, utilities will continue to preach the 3 Ps.