



FLUSHABLE

Septic Unsafe

**Disposable Wipes Cause Woes
for Onsite Wastewater Systems**



With the help of well-crafted advertising, disposable wet wipes—a product once used mainly for wiping baby bottoms—are now increasingly being used on adult bottoms. Although they are frequently labeled as “flushable,” the problems adult wet wipes have created for municipal sewer systems are well documented. Their increasing presence in sewers has created a major surge in clogged lines and sewage pumps for municipal wastewater utilities. The effect of flushed wipes on septic systems has received less attention, but problems are also being widely reported.

Disposable wet wipes are one of many types of nonwoven fabrics, manufactured by entangling fibers in a sheet or web structure, and bonding them mechanically, chemically, or thermally. The fibers are not knitted or woven as conventional fabrics are. Nonwoven fabrics have many uses, of which wipes are just one. There are also many different types of wipes including baby wipes, personal hygiene wipes, cosmetic removal wipes, and household cleaning wipes for many types of surfaces. Besides disposability, one of their attributes is their durability—compared to paper products they are less likely to fall apart when being used. This durability, however, can create problems after disposal.

But the Label Says I can Flush Them

Things get confusing for homeowners because some wipes are labeled as flushable and some aren't—baby wipes and surface cleaning wipes, for example, were never intended to be flushed. However, for those wipes that claim to be “flushable” or “septic safe,” it is debatable to what extent that may be true.

INDA, the Association of the Nonwoven Fabrics Industry publishes the document, “Guidelines for Assessing the Flushability of Disposable Nonwoven Products,” which provides the criteria that may be used to identify wipes that can be labeled as flushable. The guidelines use seven different tests to determine the compatibility of wipes with both sewers and septic systems. The guidelines have been subject to criticism, however. They only apply to INDA members and even for INDA members they are voluntary. As a result, there is no assurance for consumers that a product labeled as being flushable was tested using the INDA criteria.



Also, many wastewater officials feel the guidelines are not sufficiently rigorous. Analysis of clogs of sewers and sewage pumps show that the materials causing clogs are usually a mixture of different types of wipes—both flushable and non-flushable—plus other items such as paper hand towels and feminine hygiene products. However, these analyses also show that wipes, including those labeled as flushable, do not break up after flushing as often advertised, but tend to stay in one piece.

The Federal Trade Commission (FTC) agrees that the claim of flushability for some wipes has not been adequately proven. Under a settlement with the FTC, Nice-Pak Products, Inc., a manufacturer of wet wipes, agreed in May 2015 to stop advertising their wipes as flushable and septic safe until those claims could be substantiated. The FTC decided the tests that Nice-Pak used to determine flushability did not reflect real-world sewer and septic system conditions. Nice-Pak markets their wipes under in-store brand names at Costco, CVS, and Target, and other retailers.

The effects of flushed wipes on septic systems is not as well documented as they are for sewer systems. However, septic tank pumpers and service providers report problems as well. Wipes tend to clump into masses that can block the line to the tank or block the tank inlet. This can potentially result in wastewater backing up into the house—something no homeowner wants to deal with.



Wipes can also clog the vacuum hose that service providers use to pump the tank. Removing clogs, whether they are in the tank or the vacuum hose, makes routine servicing of septic tanks take longer. Longer service times means greater costs for the pumper—costs that naturally get passed on to the homeowner.

Service providers also report problems with wipes clogging septic tank outlets and effluent filters. Because the primary function of the tank is to allow solids to settle to the bottom, clogging of the outlet end of the tank calls into question just how well wipes settle in an actual septic system environment rather than in an artificial testing environment. People who service advanced onsite wastewater treatment systems also report problems with wipes. These include clogging of pumps, wipes that wrap around and cling to moving parts, and wipes that get deposited on the top of media filters, which affects how wastewater is distributed through the treatment medium.

A septic system, whether it is a conventional or an advanced treatment system, represents a significant investment for a homeowner. It is in the homeowner's interest to prevent any conditions from occurring that might cause the system to malfunction. Manufacturers of wipes, with prodding from the wastewater industry, have been working to make wipes that are intended to be flushable more flushable and to more clearly label wipes that are not intended to be flushed. For homeowners, however, the safest, easiest course of action is to keep all wipes out the wastewater system—whether it is a septic system or a sewer system—by disposing of them with their regular solid waste.

For More Information

This Consumer Reports video shows how easily toilet paper breaks apart in comparison to flushable wipes:

<http://www.consumerreports.org/cro/video-hub/home--garden/bed--bath/flushable-wipes/16935265001/22783507001/>

The National Association of Clean Water Agencies has a demonstration showing the resistance of wipes to disintegration:

<http://blog.nacwa.org/the-proof-is-in-the-flushing/>

The Water Environment Federation provides this article about the problem of non-dispersibles:

<http://news.wef.org/stop-dont-flush-that/>

Public Works magazine has an article about the effect of disposable wipes on municipal sewer systems:

http://www.pwmag.com/wastewater/strangled-by-disposables_1.aspx

INDA, the organization for the nonwoven fabrics industry, offers this perspective on flushability:

<http://www.inda.org/issues-advocacy/flushability/>



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Website: <http://www.nesc.wvu.edu>
Phone: 800-624-8301

FLUSHABLE

or NOT?

What to flush for septic system owners

Your toilet may seem like a convenient way to get rid of certain unwanted items—you flush it and they disappear. However, toilets are only intended to get rid of three basic items: poop, pee, and toilet paper (and on occasion—puke). Everything else you might be tempted to flush should usually be bagged and disposed of with your regular garbage.

What not to flush for septic system owners



- Wet wipes of all types
- disposable diapers
- facial tissue
- paper hand towels
- tampons, applicators, and sanitary pads
- hair
- dental floss
- incontinence pads
- condoms
- bandages
- disposable toilet brush heads
- cigarette butts
- bandages
- kitty litter
- unwanted medications

