Boomerang Alliance Submission:
Draft Standard DR AS/NZS 5328, Flushable Products.

Boomerang Alliance, representing 55 environment groups, applauds the collaboration between manufacturers, water utilities, peak bodies and consumer groups to develop these important standards for Australia. Thank you for giving us the opportunity to comment.

Our Position:
The toilet is not a bin and the most important question should not be “can it be flushed?” or “is it flushable?” but “SHOULD it be flushed?”

Put simply by many water authorities, only the three P’s: poo, pee and (toilet) paper should be flushed. Vomit and menorrhea (menstrual fluid) are also acceptable.

This SYDNEY WATER animation sums it up well:
https://youtu.be/tL9PjkzfaU8

If the item contains any plastic (fossil fuel derived, bioplastic, oxodegradable or any other polymer - as defined on page 2 - 1.4.5) the answer must be **no** and it should be labeled clearly: DO NOT FLUSH, in english, community languages and/or with universally recognised graphic, such as the one pictured here.

To determine which items need this label: refer to items found and documented by the CSIRO, in the Australian Marine Debris Initiative or by Sydney Water, including but not limited to:
https://www.news.com.au/technology/environment/ad-campaign-launched-to-target-shocking-items-flushed-down-sydney-toilets/news-story/f2ffb0b188c3fdfa14d658c516fa2ca3

- Cotton buds
- Wipes
- Sanitary items
- Other personal care products eg dental floss and picks
- Clothing tags

Simple solutions for everyone:
- Have a bin in your bathroom
- Only flush poo, pee and paper

- consume wisely and help to reduce demand for materials that are possible sources of marine debris via the sewerage system or storm water. [https://www.awe.gov.au/environment/marine/marine-pollution/marine-debris]

Simple solution for Manufacturers:

- Do not mislead the public by calling your products 'flushable'
- Label any potential marine debris items clearly DO NOT FLUSH - and use an approved standard graphic, universally understood to mean the same.

Simple solutions for retailers, marketing teams, Influencers, media providers

- Be clear that products that should not be flushed are promoted that way
- Promote responsible disposal of bathroom products.
- Do not condone messaging that may encourage inappropriate behaviour eg flushing wipes, without a disclaimer that this practise is harmful to plumbing infrastructure, public health and marine life. eg scene in Deadpool 2: Toilet Paper scene - Man raves about "Huggies Natural care wet wipes" used with toilet paper - https://www.youtube.com/watch?v=OpBM4JRs1mU

Source of image: Sewage Outfall Related Marine Debris: https://www.cleanocean.org/cotton-bud-survey.html

This submission was prepare by Lisa Wriley, lisa.wriley@boomerangalliance.org.au, Oct 2021.

Boomerang Alliance Comments [in bold] on *Draft Standards* **:**

Page iii): Preface

The objective of this document is to provide test methods and criteria for determining if products are suitable for disposal by flushing them down a toilet. It also provides guidance on and requirements for the labelling and marking of products that are likely to be disposed via the toilet. This document is for manufacturers of such products, as well as managers and other stakeholders involved with wastewater transport and treatment systems.

We recommend avoiding the terminology of 'disposal by flushing' as it encourages the perception of the toilet as a rubbish bin. It is important to hold the line that toilets and downstream plumbing connect us to the environment and only poo, pee and paper are appropriate to be flushed.

The intent and objective of the Standard proposed should not be to test methods and criteria for suitability for flushing but to confirm the purpose of the sewage system and the materials that it is designed to receive.

We also note that a flushing toilet is only one system for disposing of human waste. There are also alternative systems such as dry composting which could significantly reduce the problems caused by flushing unsuitable products as well as reducing water consumption, particularly in water scarce catchments.

Sydney Water's message from 2010 still rings true:
"For most people, 'wastewater' is probably out of sight and out of mind.
Pull the plug - and it's gone. Flush the toilet - and forget about it.

But the truth is, wastewater represents a significant link between our homes, industries and the environment. That's because much of the treated wastewater is eventually released into waterways and oceans. Wastewater is 99.9% water. The remaining 0.1% is generally dissolved or suspended materials.

Our wastewater system is mainly designed to transport and treat human waste. It isn't designed to take domestic rubbish and waste... like oil, cotton-tips, band-aid wrappers, plastics and food waste. Those unwanted materials cause real problems for the sewerage pipes - like blockages and chokes. These in turn can cause sewage overflows where raw sewage can enter our waterways or homes.

Even though Sydney Water works hard to safeguard water supplies, maintain healthy ecosystems and treat wastewater - we all have a responsibility to care for our precious water resources." 2010 Sydney Water

Page v) Introduction
"Some of these items (claiming to be flushable) are not compatible with current infrastructure"

Before asking the infrastructure question - it is essential to ask the "Does it contain plastic?" question. If the answer is YES, then automatically it must be labelled DO NOT FLUSH, with standard graphic. (shown here)

The principal objective of wastewater systems management is to protect public health, the environment, the work, health and safety of workers and sustainable development."

CSIRO has thoroughly documented the harm caused by marine debris, most of which is plastic - which "injures and kills wildlife, has the potential to transport chemical contaminants, and may pose a threat to human health….Water flow (e.g. storm water) and wind contribute to the transport of debris towards marine ecosystems." [https://www.csiro.au/en/research/natural-environment/oceans/marine-debris]
It is well documented by beach clean up volunteers and researchers that certain kinds of plastic waste is found near sewerage outfalls eg plastic stemmed cotton buds [https://www.betterbuds.org.au/ and https://www.tangaroablue.org/event/sea-week-clean-up-boat-harbour-ocean-outfall-kurnell-nsw/]. Education and product changes are needed to prevent this problem.

Sustainable Development Goal #14: Life Below Water
Healthy oceans and seas are essential to our existence. They cover 70 percent of our planet and we rely on them for food, energy and water. Yet, we have managed to do tremendous damage to these precious resources. We must protect them by eliminating pollution ….. and immediately start to responsibly manage and protect all marine life around the world. https://www.globalgoals.org/14-life-below-water

There are many factors that contribute to successful wastewater treatment systems:
One of these is the prevention of blockages. When blockages occur, there is an unacceptable risk that wastewater may spill from the system and create public health and environmental risks along with otherwise unnecessary expenditure in rectifying the issues. (page v)

This is another reason to ensure no plastic enters the wastewater system in the first place, as various screening systems may be by-passed and be ineffective in removing them. Other systems, such as grinders (page 4, 2.4) may create more microplastics downstream.

Introduction Paragraphs 5 and 6: *"and suitable for toilet flushing" and "compatibility of products flushed via the toilet"*
We suggest "at risk of being flushed down a toilet" instead of 'suitable' and stronger language that makes it clear that items containing plastic must not be flushed down the toilet/ are INCOMPATIBLE, regardless of whether they can be flushed.

Page 1: Definitions
1.4.2 Flushable product = product considered suitable for disposal through sewer networks and wastewater collection and treatment systems, including onsite treatment systems because it will

not materially adversely impact those systems *or be recognisable* in effluent leaving onsite and municipal wastewater treatment systems or in the post-treatment products of treatment sludge.

This definition needs improvement - it is not enough to say "not recognisable in effluent leaving onsite and municipal wastewater treatment systems or in the post treatment products of treatment sludge"* - This implies it just has to be small enough so it is not seen and will pass through without causing a blockage. Microplastics are often hard to see, especially in water, but cause great harm in the receiving environment and are known to be entering the food chain. Studies have shown that plankton will eat plastic [https://www.newscientist.com/article/dn27849-plankton-snacking-on-plastic-caught-on-camera-for-the-first-time/]. The only (allowable) 'flushable product' should be toilet paper. Everything else to be flushed is human excreta.

Page 3 Section 2: Framework

Page 5 - 2.7 Environmental considerations

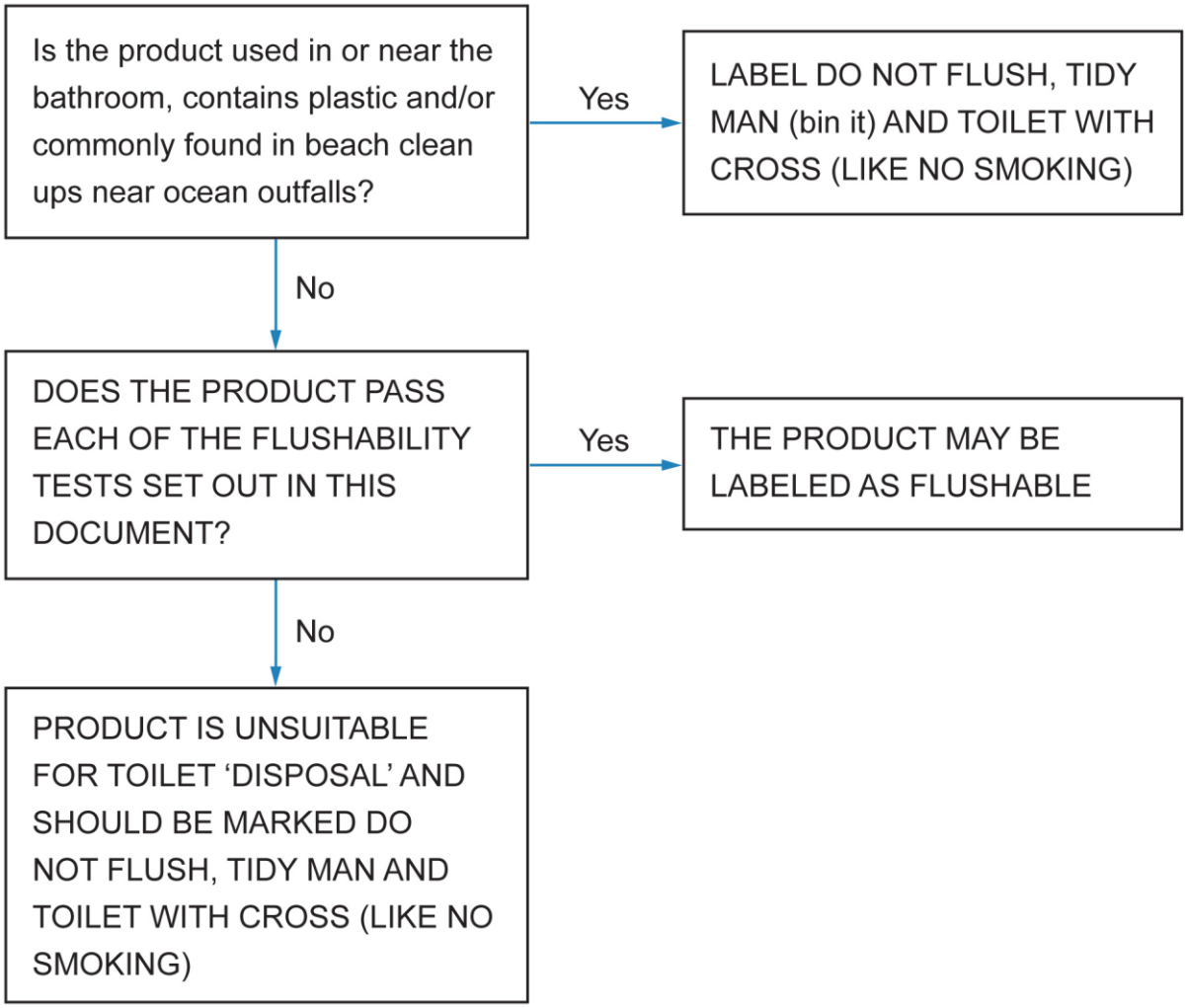
Stakeholders and the general public need to be mindful of materials that could enter wastewater treatment systems and how they may affect wastewater systems and the receiving environment. From time to time, sewers overflow to the environment for a multitude of reasons. Therefore, compatibility (or environmental fate) of materials that enter sewers by whatever means is important.

[SOURCE: ISO/TR 24524:2019 Clause 9, modified. Copyright ISO. All rights reserved.]

YES - environmental fate of materials is critical. The receiving environment is critical. No plastic should be entering the wastewater system. The water ecosystems must be kept healthy. Any plastic, no matter how small, is a threat to marine life at the end of the pipe. Education to communicate this message in community languages and on multiple platforms is needed.

Page 6: Section 3 General Requirements

3.1 Determining if a product conforms to this document - we recommend this flow chart:



SAMPLE DO NOT FLUSH SYMBOLS

3.2 TESTING FOR COMPATIBILITY WITH TOILET FLUSHING

To protect the wastewater system, a discharged material or product needs to be compatible with existing wastewater infrastructure. A discharged material or product that is flushed or disposed via the toilet shall be able to —

(a) be flushed from the toilet bowl;

(b) pass through the drain line (pipes inside and/or immediately outside property);

(c) be transported through the wastewater collection system to the treatment facility;

(d) not adversely affect the intended performance of wastewater treatment systems; and

(e) not adversely affect the downstream environment when in a disintegrated state.

We recommend this change in order of priority:

To protect the wastewater system, a discharged material or product needs to be compatible with existing wastewater infrastructure. A discharged material or product that is flushed or disposed via the toilet shall be able to —

(a) not adversely affect the downstream environment when in a whole or disintegrated state

(b) be flushed from the toilet bowl;

(c) pass through the drain line (pipes inside and/or immediately outside property);

(d) be transported through the wastewater collection system to the treatment facility and

(e) not adversely affect the intended performance of wastewater treatment systems.

If the principle is that only the three P's are acceptable, why is such a test being considered? Unsuitable/unacceptable products should be tested against other discard options to gauge their suitability, not the sewage system. Only toilet paper should be the subject of any testing.

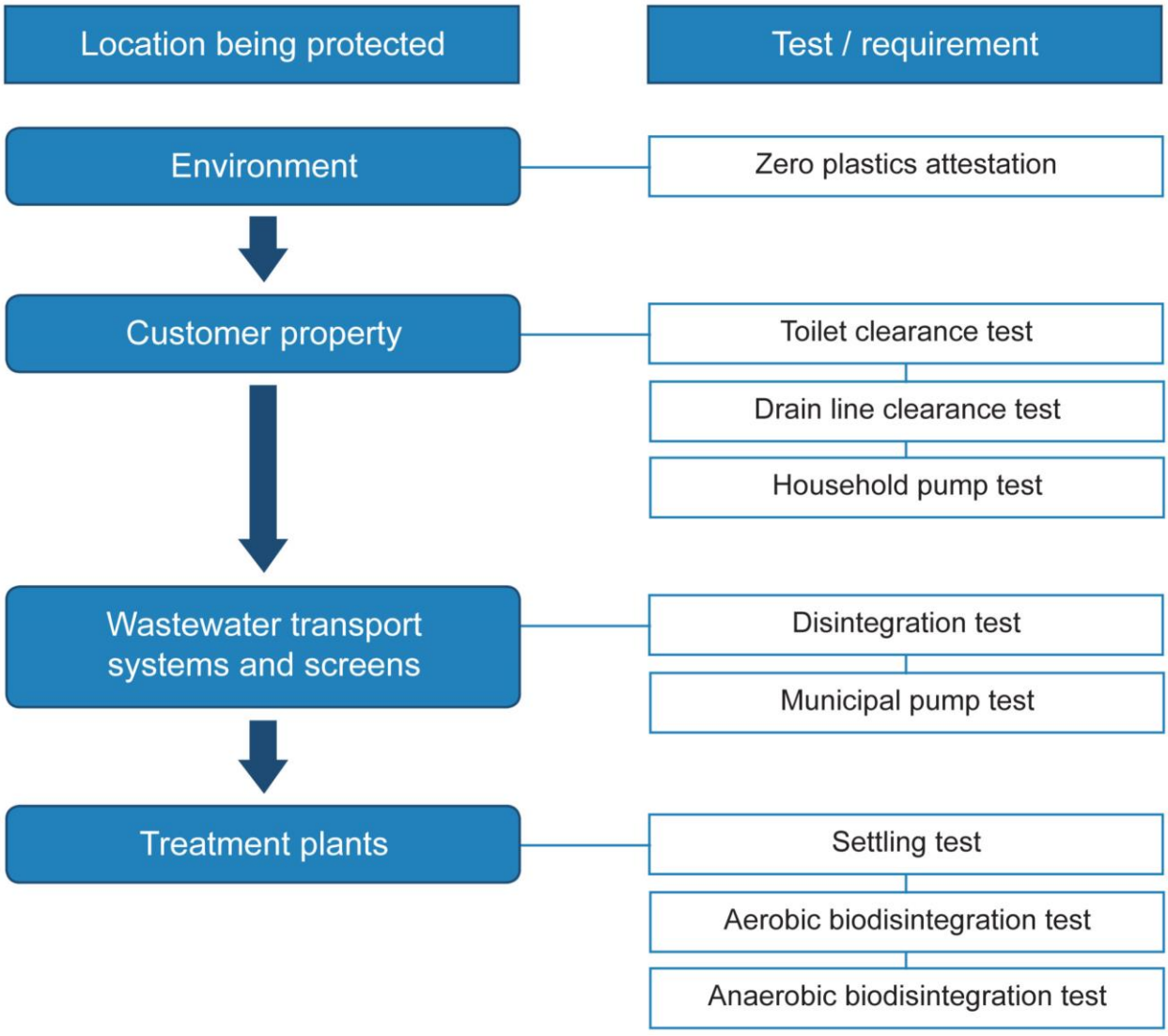
Figure 3.2 — Components of the wastewater system and locations for testing the compatibility of products flushed down the toilet

We disagree with the Final stage of Location being Protected being: ENVIRONMENT - ZERO PLASTICS ATTESTATION

If the product contains plastic it needs to be marked DO NOT FLUSH at the beginning, regardless of whether it passes the 8 other tests (Toilet clearance test, drain line clearance test, Household Pump Test, Disintegration Test, Municipal Pump Test, Settling Test, Aerobic bio disintegration test and Anaerobic bio disintegration test).

We need to stop it at the source.

WE RECOMMEND THIS FLOW CHART INSTEAD:



Page 9 Section 4 - Labelling

4.2 Packaging:

The packaging of all finished products that have a high potential to be discarded via the toilet should clearly inform consumers whether or not the products are appropriate for disposal via the wastewater system.

This is good and use of the term 'potential to be discarded' is better than 'disposed'. We agree that the packaging should clearly inform consumers whether or not it is approved to be flushed.

4.3 Location
We agree.

Page 10 - 4.6 states
The written instruction "Flushable" may be used with a flushable symbol. The written instruction "Do Not Flush" may be used with a DNF symbol. Any on-pack instruction for product disposal shall be clear, explicit and in English.

This should not be only in English - other community languages AND a universally recognised DNF picture should be used. See our example below: 'flushable and do not flush symbols'.

(a) "Flushable" symbol options

(b) "Tidy Man" symbol

<u>Important Questions:</u>
How will Standards Australia promote the new labels and educate the community?
What are the penalties for companies who put misleading labels on packaging?

<u>Suggested messages:</u>
Have you got a bin in your bathroom? ("What you bin doing in your bathroom?!")
Prevent plastic pollution: have a bin in your bathroom and empty it regularly
The toilet is not a bin!

REFERENCES:

1. https://www.sydneywater.com.au/Education/Tours/virtualtour/html/primary-treatment.html
2. https://www.sydneywater.com.au/Education/Tours/virtualtour/html/secondary-treatment.html
3. https://www.sydneywater.com.au/Education/Tours/virtualtour/html/tertiary-treatment.html
4. Sydney Water Glossary: https://www.sydneywater.com.au/Education/Tours/virtualtour/html/glossary.html#Inorganic%20compounds

5. https://www.wsaa.asn.au/news/new-flushable-products-standard-help-clean-mess

6. Only flush the three P's" https://www.hunterwater.com.au/news/reminder-for-customers-to-only-flush-the-three-ps

7. SOURCES OF PLASTICS: https://research.csiro.au/marinedebris/sources-of-plastics/

8. Blocked Sewers: https://www.barwonwater.vic.gov.au/water-and-waste/sewage/sewer-blockages

9. Sydney Water: https://www.sydneywater.com.au/Education/Tours/virtualtour/html/wastewater-journey.html
10. Managed water cycle -The natural water cycle that has been modified by people to ensure a constant water supply and the safe disposal of wastewater. [https://www.sydneywater.com.au/Education/Tours/virtualtour/html/glossary.html#Natural%20water%20cycle]

11. Fatbergs - cooking oils and fat and so called 'flushable wipes' https://www.abc.net.au/news/2019-01-10/fatberg-how-to-remove-and-stop-them-building-up/10701656

12. ACCC lost appeal re 'flushable wipes' https://www.accc.gov.au/media-release/penalty-for-kimberly-clark-for-false-claims-flushable-wipes-were-made-in-australia

13. The Guardian 7/10/21 - The Unflushables: https://www.theguardian.com/australia-news/2021/oct/07/the-unflushables-sydney-water-warning-after-weird-flushes-cause-blockages

14. ISO 24513:2019 Service activities relating to drinking water supply, wastewater and stormwater systems — Vocabulary: https://www.iso.org/standard/72607.html

15. ISO 24513:2019(en) Service activities relating to drinking water supply, wastewater and stormwater systems — Vocabulary https://www.iso.org/obp/ui/#iso:std:iso:24513:ed-1:v1:en:term:3.6.13
16. ISO/TR 24524:2019(en) Service activities relating to drinking water supply, wastewater and stormwater systems — Hydraulic, mechanical and environmental conditions in wastewater transport systems https://www.iso.org/obp/ui/#iso:std:iso:tr:24524:ed-1:v1:en

17. Sewage Outfall Related Marine Debris: https://www.cleanocean.org/cotton-bud-survey.html

18. SO Shire Submission to Upper House May 2021: https://www.parliament.nsw.gov.au/lcdocs/submissions/71446/0057%20SO%20Shire.pdf

19. Why you should never flush baby wipes https://www.insider.com/why-you-should-never-flush-baby-wipe-down-the-toilet-2019-12

20. ManGroomer Youtube ad: https://www.youtube.com/watch?v=NeRPq3SajoA

21. Man Wipes for Man Parts https://www.youtube.com/watch?v=0a4YX6RIP6c

22. Scene in Deadpool 2: Toilet Paper scene - Man raves about “Huggies Natural care wet wipes” used with toilet paper - https://www.youtube.com/watch?v=OpBM4JRs1mU

YES	NO	REASON for NO
POO	Anything plastic - cotton buds with plastic stems; wipes, caps off body wash products, dental floss products.	Do not biodegrade, cause blockages, fatbergs and some make it out into the environment, plastic pollution
PEE	Sanitary items	Contain plastics, cause blockages, plastic pollution
Toilet PAPER	Thicker paper eg tissues, paper towels	Cause blockages, don’t break up sufficiently in time frame
Vomit	-	-

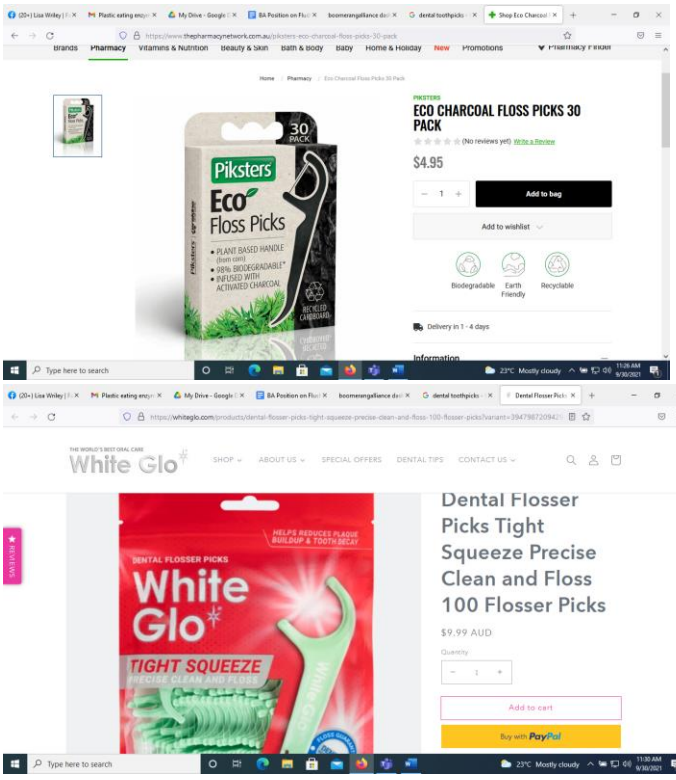
PROBLEM PRODUCTS THAT NEED <u>DO NOT FLUSH</u> symbol

COTTON BUDS

https://www.chemistwarehouse.com.au/Buy/79596/Health-Beauty-Cotton-Buds-with-Chrome-Lid-300-Pieces

DENTAL ITEMS

eg ECO Toothpicks - 'biodegradable' (will make some customers think its ok to flush!)



WIPES:

What are wet wipes made of?

Ninety percent of wet wipes on the market are produced from nonwoven fabrics made of polyester or polypropylene. The material is moistened with water or other liquids (e.g., isopropyl alcohol) depending on the applications.
https://en.wikipedia.org/wiki/Wet_wipe

“WSAA and the urban water industry in Australia and New Zealand have been concerned about the contribution of wet wipes products to pipe blockages for some time.”

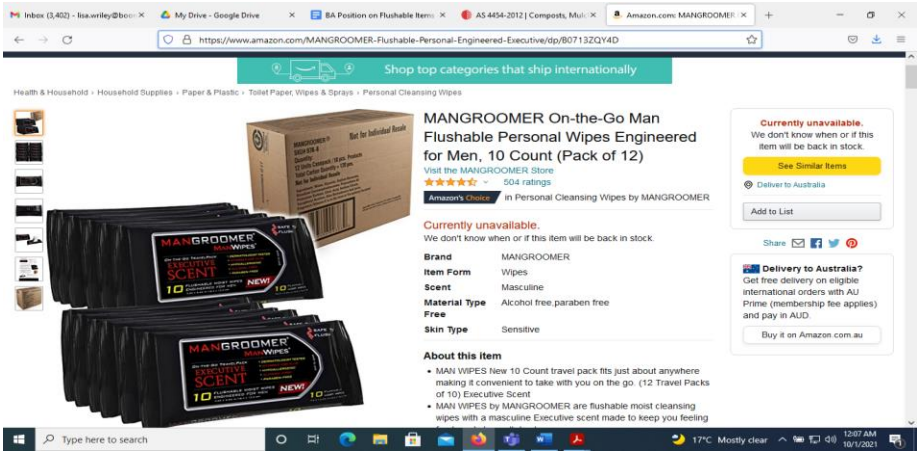
There are a wide array of opinions and claims about wipes:

Can you flush wipes? Manufacturers of baby wipes will often indicate on the packaging that the product is "flushable." Plumbing experts say **there's no such thing as a flushable wipe**. Because wipes don't break down in water, they can clog up plumbing systems in a home, and damage pipes and machinery at wastewater treatment plants.20 Dec 2019

https://www.insider.com/why-you-should-never-flush-baby-wipe-down-the-toilet-2019-12

Did you know **men** are bigger users of wipes than women?

What are Man Wipes?
“MAN WIPES are **flushable moist cleansing wipes with a masculine Executive Scent** made to keep you feeling fresh and clean all day long. Engineered specifically for men, use MAN WIPES in addition to toilet paper to effectively clean and eliminate any unwanted residue.”
https://www.amazon.com/MANGROOMER-Flushable-Personal-Engineered-Executive/dp/B0713ZQY4D




Johnson's
skincare
fragrance free
baby wipes
Enriched with moisturisers
Effectively cleans & protects baby skin barrier for up to 4 hours
80 soft cloth wipes
redcycle
Face
Hands
Bottom
Directions to use. Partially peel back sealing sticker and pull out wipes. Seal the sticker after each use to keep wipes moist.
Storage Instructions: Store in dry cool place and away from direct sunlight.
Warnings: Use under adult supervision.
Safety Tip: Keep out of reach of children.
Do not flush.
Ingr. Scents. Water, Phenoxyethanol, Sodium Benzoate, Glycerin, Carbomer, Disodium EDTA, Citric Acid, Sodium Hydroxide, Glyceryl Caprylate, Dipolyhydroxystearate, p-Anisic Acid, Sodium Hydroxide, Glycerin, Polysorbate
Enriched with moisturising ingredients, no added fragrance for soft & smooth skin
Hypoallergenic, tested with dermatologists
Gentle cleaning for babies
Healthy Feeling Skin, Happy Baby
As your baby grows, you're faced with new diaper surprises. And with all the wiping & cleaning, little bottoms need extra protection.
We design for safety and efficacy, and prioritize naturally derived ingredients where possible.
Specially for newborn
9 300607 260373


This packaging is recyclable in Australia through the REDcycle Program. To find your nearest drop off location, visit www.redcycle.net.au.
Note: please remove flip top lid before placing in redcycle bin
Wrapper
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OTHER
Flip top lid
5
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Feeling Skin, Happy Baby
baby grows, you're faced
diaper surprises. And


Curash
Baby Care
Helps Protect Against Nappy Rash
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KIND TO SKIN
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SOAP & PARABEN FREE
PROUDLY MADE IN AUSTRALIA
80 SUPER THICK & Cushion Soft Wipes
188mm x 160mm


CURASH™ BABYCARE VITAMIN E WIPES specially formulated to moisturise & protect baby's delicate skin.
Use in combination with CURASH™ Anti-Rash Baby Powder or CURASH™ Medicated Nappy Rash Cream to help soothe, heal and prevent nappy rash.
Look out for the full range of Curash™ BabyCare products.
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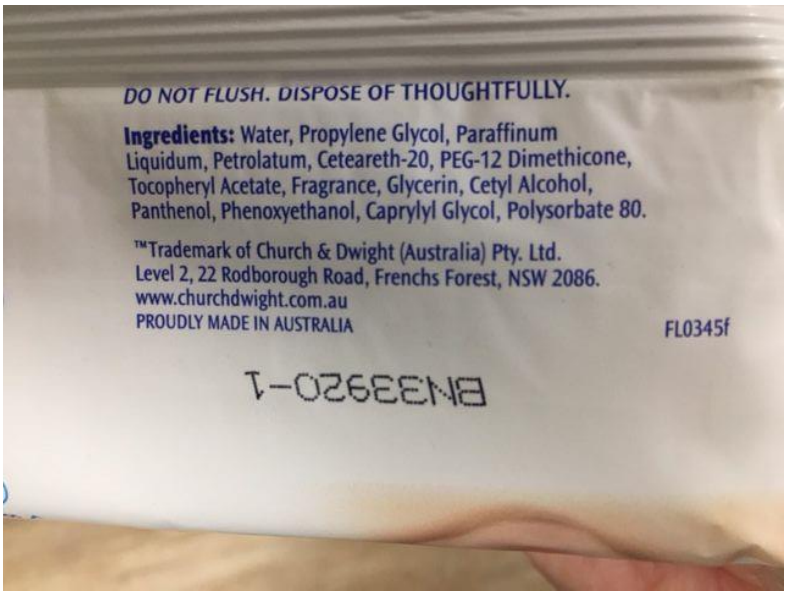

DO NOT FLUSH message is hidden under the packaging flap.

This product claims to be FLUSHABLE. (sold in Kariong Pharmacy Oct 2021)

End of BOOMERANG ALLIANCE SUBMISSION. Thanks for the opportunity to comment.
Find out more about the Boomerang Alliance:
https://www.boomerangalliance.org.au/who_we_are