Are Teabags Plastic?

From the teas.co.uk wiki

> **The short version:** Teabag plastic content: paper bags use a polypropylene heat seal, pyramid bags are mostly nylon or PET, and only certified plastic free bags are fully clean.

"Are teabags plastic?" Often yes, partly, and people are surprised. It belongs with our teabag safety guides, beside microplastics explained.

Last reviewed by the teas.co.uk team in May 2026.

General information from published studies and brand testing, correct as of May 2026; the science is still moving, figures are estimates, and none of this is medical advice.

Teabag types and plastic content at a glance

Bag type	Plastic content
Standard paper rectangular teabag	Yes, a polypropylene heat seal (about 20 to 30% of the bag's mass)
Premium paper bag with string-and-tag	Often plastic-free if no heat-seal (look for stitched construction)
"Silken" pyramid bags	Usually 100% plastic mesh (nylon or PET)
Pyramid bags labeled "PLA"	Plant-based plastic, technically still polymer
Pyramid bags labeled "plastic-free"	Check: may include PLA; only bags made solely of paper are plastic free
Loose-leaf tea (no bag)	No bag, no plastic question
Cellophane outer wrapping	Often plastic-coated cellulose
Outer cardboard box	Usually paper-only, sometimes plastic-coated inside
UK brands fully plastic-free	Clipper, Pukka, Yorkshire Tea (since 2020), Heath and Heather, Hampstead
UK brands still using plastic	Several mainstream brands still use polypropylene heat-seal

The short answer

Often yes, at least partly. Most conventional paper teabags contain a small amount of plastic, polypropylene, used to heat-seal them; many silken or pyramid bags are plastic mesh or plant-based PLA. Few are actually

free of plastic. The two clean choices are loose leaf, which has no bag at all, or a specifically certified plastic-free bag.

The paper-bag surprise

The biggest surprise for most UK drinkers is that a teabag looking like paper is usually not pure paper. Standard paper bags use a polypropylene heat-seal to hold the edges together; it is a small visual share but a substantial weight share, around a fifth to a third of the bag's mass, and it does not change the bag's appearance. So it-is-just-paper is usually wrong. The way to tell is to check the maker's explicit claim (plastic-free, biodegradable, home compostable) or look for stitched-edge construction, which needs no heat-seal. Without that labelling the difference is invisible. See what PLA is.

The pyramid-bag situation

Silken pyramid bags, marketed as premium for whole-leaf tea, are usually made entirely of plastic mesh. The silk name is pure marketing; no silk is involved. The material is typically nylon, the long-standing pyramid material, or PET, the same plastic as drink bottles, and the whole bag is plastic. Some brands have moved to PLA pyramids marketed as plant-based, but those are still plastic, just plant-derived. Plant-based pyramids exist (Teapigs uses them, and says they need industrial composting), so check each maker's own disposal advice. See microplastics.

Verifying a plastic-free claim

Plastic-free claims reward careful reading. Look for explicit plastic-free or 100% biodegradable wording; vague phrases like natural materials or even compostable can still include plastic. Check whether PLA is used, because some compostable bags need industrial composting and will not break down in a home bin, lingering for years much like plastic. Trust independent standards, TUV Austria's OK Compost Home for home-compostable, or EN13432 for industrial. And note the difference between biodegradable, industrially compostable and home compostable, which are not the same claim. The most reliable verification comes from established ethical brands rather than newly-claimed transitions. See which are plastic free.

Why polypropylene heat-seal is used

The polypropylene heat-seal exists for one practical reason: it is the cheapest reliable way to hold a bag together on a high-speed production line. The seal has to set fast, hold through brewing and cost almost nothing, and polypropylene does all three better than the alternatives. Plastic-free options, stitched edges, plant-based seals, other heat-seal materials, work but cost more per bag and need line modifications. It is cost-optimisation under supermarket pricing pressure rather than anything malicious, and moving away from it means either a premium price or the manufacturer absorbing the cost, both of which have happened as plastic-free went mainstream.

The UK brand transition timeline

The big UK brands moved at different times. Clipper and Pukka have been plastic-free throughout. Yorkshire Tea announced and completed its transition in 2020, one of the largest mainstream switches. PG Tips

completed plastic-free across its standard lines by around 2022 to 2023 under Lipton Teas and Infusions. Tetley has converted some lines but kept plastic in some legacy products as of 2026, and Typhoo has signalled a plastic-free move as part of its post-rescue relaunch. The direction is industry-wide but not yet universal, so checking the specific product line still matters.

Loose-leaf: the clean answer

For anyone wanting to remove the question entirely, loose-leaf tea is the cleanest answer: no bag, no heat-seal, no microplastic shedding and no compostability complication. It is usually cheaper per cup than premium bagged tea and generally better in the cup, since you get whole leaf rather than fannings. The only barriers are practical, a little kit and a little clean-up, not economic. See loose leaf tea.

What to buy

For verified plastic-free bagged tea buy Clipper, Pukka, Yorkshire Tea (since 2020), Heath and Heather or Hampstead. For PG Tips plastic-free buy PG Tips. For complete plastic elimination buy loose-leaf tea. For the kit buy a teapot, a stainless-steel infuser or a gaiwan.

Reference noted

- Hernandez et al., Plastic Teabags Release Particles (2019)
- Food Standards Scotland: Microplastics in food

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teas · Spend less on prestige, more on freshness. A two month old supermarket box still tops a three year old gift tin of tea.

More tea reading

For the microplastic context see microplastics in teabags explained. For verified plastic-free UK brands see which teabags are plastic-free. For PLA specifically see what is PLA in teabags. For PFAS concerns see PFAS in teabags. For loose-leaf brewing see brewing loose leaf tea. For switching see the switch guide.

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