

How to Buy a Non-Toxic Toaster or Toaster Oven

As you try to create a healthier home and buy fewer products with toxic materials, toasters may not be top-of-mind. But like many consumer products, toasters and toaster ovens can contain materials and chemicals associated with negative health effects. It's not always easy to know what to avoid and appliance manufacturers are not often transparent about the materials used to make their products. This guide is designed to help you know what to look out for and which brands and models to consider.

Features of Potential Concern

Non-Stick Coating

Some toaster ovens have a non-stick interior to make them easier to clean. The non-stick coating may contain polytetrafluoroethylene (PTFE). Teflon is one of, but not the only, brand name for PTFE. PTFE is part of a family of chemicals known as PFAS. These "forever chemicals" bioaccumulate in the environment and are associated with a number of negative health effects. PFOA, a chemical that was used in the process of making PTFE, has been largely phased out due to a voluntary agreement between manufacturers and the EPA. However, according to EWG, there is no evidence that the chemicals used to replace it are any safer. EWG recommends avoiding all PFAS chemicals.

Any toaster that uses a PTFE coating is on the list of products to avoid.

Plastic Cases

According to madehow.com, to make heat-resistant plastic cases, flame retardants and smoke suppressants are added to the petroleum and coal compounds of plastic. These plastics off-gas and the off-gassing can increase when heated. Toasters with plastic cases are easily avoided, with most manufacturers offering stainless steel models. If the product description does not specify that it is made of stainless steel, make sure to confirm that it is not made of plastic. Silver-colored plastic can sometimes look like stainless steel.

Models with plastic cases are not included in this guide and are not recommended.

California's Proposition 65 Warning Label

California Proposition 65 is intended to help Californians make more informed decisions about protecting themselves from chemicals that could cause cancer, birth defects or reproductive harm. There is a list of approximately 900 chemicals that can only be used in levels that fall below an established limit. Products sold in California that use one or more of the restricted chemicals in levels above their limit need to have a warning label on the product. These limits are more stringent than federal regulations. Some manufacturers put the label on all of their products that require it, while some just put it on the products that are being sold in California. Therefore, if you do not live in California and do not find a warning label on a product it does not necessarily mean it does not contain one of the restricted chemicals.

The labels can be confusing because they are not required to say how much of the chemical is in the product nor how a consumer might be exposed to it. In some instances, the consumer has very little exposure to the chemical with normal use of the product.

Aluminum

Exposure to an excess of aluminum has been linked to numerous health effects including nervous system problems and bone disease. Studies show aluminum can migrate from food contact materials and that migration increases with more contact time and greater acidity of the food. Fortunately, most toaster oven surfaces that come into contact with food are not made of aluminum. Readers have questioned whether internal aluminum components on pop-up toasters, specifically the “support bar” that holds the bread, are of concern. While this is not likely a significant exposure due to the short duration of food contact, there are toasters available that do not use untreated aluminum support bars.

Ceramic Coatings

This is an emerging area of concern so more research is needed. A study found that quasi-ceramic coating can release titanium dioxide nanoparticles into acidic food at very high temperatures (900°). It also showed that scratches and degradation could lead to release at lower temperatures. This is a concern for cookware but is not likely a concern for toaster oven interiors that do not come in direct contact with food. Racks and pan accessories with ceramic coatings can be replaced with untreated stainless steel products. Any toaster that uses a ceramic coating is on the list of products to buy with caution.

Zinc Coatings

Zinc coatings provide durability and contribute to heat and energy distribution. I have not been able to find any study that shows that zinc coatings present a health risk. There has been emerging data that shows zinc nanoparticles can migrate from plastic coatings used in food packaging, but that is not the same as zinc-coated steel. If zinc is heated to or near its boiling point it can produce toxic fumes but toasters do not come close to those temperatures.

Best Toaster Ovens

Homelabs

Digital Countertop Convection Toaster Oven

Exterior Material: Stainless Steel

Interior Material: 304 Grade Stainless Steel

Rack Material: 304 Grade Stainless Steel

Finish: No coating on interior or rack. The baking tray has a non-stick coating. Using this pan is not recommended. Amazon sells untreated stainless steel baking trays that you can buy to replace the baking tray that comes with the toaster.

Proposition 65: Yes, lead is used in the power cord. Unless you plan to frequently unplug the toaster this is not a significant exposure.

Overall:

With the exterior, interior, and rack made of stainless steel and the absence of a non-stick coating, this is the best toaster oven option. While there is no safe level of lead, if you plan to plug the toaster in and leave it, exposure should not be a concern.

Black + Decker

Model #TO1760SS, 4 Slice Toaster Oven

Model #TO3280SS, 6 Slice Countertop Oven

Model #TO4314SSD, 6 Slice Convection Oven

Exterior Material: Stainless steel

Interior Material: Stainless steel

Rack Material: Stainless steel with no coating

Finish: Zinc coating on interior.

Proposition 65: Yes, there is styrene used in small plastic feet.

Overall:

These models also are made with a stainless steel exterior, interior and rack. The zinc coating has no known health effects at this time. It does have a warning label for styrene which is a toxic substance that is used to create polystyrene. It is best to avoid polystyrene but the amount in this application is so low that it is not a concern.

Buy with Caution

KitchenAid

Model #KCO211BM

Model #KCO255BM

Exterior Material: Stainless steel

Interior Material: Stainless steel

Rack Material: Chrome-plated steel

Finish: Ceramic coating (PFOA- and PTFE-free)

Proposition 65 Warning: Yes, lead in the cord.

Overall:

More research is needed on the health effects of ceramic coatings. Based on the small number of studies, ceramic coating on the toaster interior should not pose a risk because food does not come in direct contact it.

Cuisinart

Models #TOB-1010, TOB-260N1, TOB-135N, TOB-40N, TOB-60N1

Exterior Material: Stainless steel

Interior Material: Stainless steel

Rack Material: Aluminum-plated steel. The baking pan is also aluminum coated steel.

Finish: Ceramic coating (PFOA- and PTFE-free)

Proposition 65 Warning: No

Overall:

More research is needed on the health effects of ceramic coatings. Based on the small number of studies, ceramic coating on the toaster interior should not pose a risk because food does not come in direct contact it.

Using the aluminum plated rack and baking pan is not recommended but stainless steel options are available.

Avoid Buying These Toaster Ovens

Rosewill – All toaster oven models have a non-stick coating.

Breville- All toaster oven models have a non-stick coating similar to Teflon.

Note: Waring was a good choice for toaster ovens because they do not use non-stick coatings but they no longer make toaster ovens for residential use. If you have an older model Waring toaster oven hang onto it!

Pop-Up Toasters

Fortunately, none of the manufactures I spoke with use non-stick coatings in their pop-up toasters. The following also do not use aluminum support bars or plastic cases.

Kitchen Aid

All models have a stainless steel exterior and support bar.

Cuisinart

Model #CPT 2400 has a stainless steel exterior and chrome support bar.

The Dangers of Burnt Toast

A study by the University of Texas found that burnt toast creates fine particle air pollution that is 150 times the W.H.O. limit. Bread toasted to golden brown has one-tenth the fine particle pollution as bread toasted to dark brown. So, no matter which toaster you decide to buy, make sure you don't overcook your toast and clean any debris before use!

Sources:

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