

Protect New Yorkers from FDA's Failure: Ban Unsafe Food Additives via A6424A/S6055B

FDA Allows Dangerous Food Chemicals to Remain on the Market

The US Food and Drug Administration is the federal agency responsible for ensuring the safety of food additives,ⁱ both before and after they come to the market.¹ Yet frequently, the agency takes insufficient action to protect consumers, even when safety risks are discovered. Some additives authorized by FDA, like **Red 3**, butylated hydroxyanisole (**BHA**), azodicarbonamide (**ADA**), and **potassium bromate**, have the potential to cause cancer according to the FDA itself or according to other authorities, like the US National Toxicology Program and the World Health Organization (see **Table 1** for details and references). Others, like titanium dioxide (**TiO₂**), **propylparaben**, and brominated vegetable oil (**BVO**) are linked to other adverse effects, like DNA damage and reproductive harm (Table 1). Most of these additives are banned or heavily restricted in the European Union (Table 1). FDA's inaction needlessly exposes the public—including those especially susceptible to toxic exposures like children and pregnant individuals²—to dangerous food additives.

States Can Act Where FDA Refuses

Fortunately, state policymakers have the power to take decisive action to protect consumers while FDA fails to act. Last year, California became the first state to ban Red 3, BVO, potassium bromate, and propylparaben.³ New York Assemblymember Dr. Anna Kelles and Senator Brian Kavanagh have introduced a bill (A6424A/S6055B) which would ban those same four chemicals and three additional chemicals—titanium dioxide,ⁱⁱ BHA, and azodicarbonamide—in New York.^{4,5}

Why Ban these Seven Food Additives?

Each of the seven chemicals is linked to severe human health harm and is unnecessary (Table 1).

- FDA classified **Red 3** as carcinogenic in 1990, and promised to ban it in food but never did.^{6,7}
- **ADA**, **BHA**, and **potassium bromate** are also linked to cancer.
- **BVO** and **TiO₂** can accumulate in the body and potentially cause harm to our organs and tissues.
- **Propylparaben** causes reproductive harm and hormone disruption.
- **ADA**, **BVO**, **potassium bromate**, **propylparaben**, and **TiO₂** are fully prohibited in the EU.ⁱⁱⁱ
- **Red 3** is allowed only for use in the EU in certain kinds of cherries.
- **TiO₂** and **Red 3** are color additives, and thus are completely unnecessary, serving only to make food more visually appealing as a marketing tool for the food industry.
- **BVO**, **potassium bromate**, **propylparaben**, and **ADA** have been largely phased out of food, with very few US products still listing them as ingredients.
- FDA acknowledges that **ADA** is not a necessary additive.^{iv}

ⁱ In this case, "food additive" refers to substances intentionally added to foods to align with how the term is typically understood by the general public, which is different than how the term is defined in US federal statutes and regulations.

ⁱⁱ Dairy products will be exempted from this ban in NY.

ⁱⁱⁱ A previous version of this factsheet incorrectly stated that BHA, not BVO, had been banned in the EU. This version has been edited for accuracy.

^{iv} FDA's webpage "Azodicarbonamide (ADA) Frequently Asked Questions" states, "Is ADA necessary to make bread? No. The use of ADA as a whitening agent and dough conditioner is not necessary to make bread and there are alternative ingredients approved for use available."

- For many US food products containing the substances to be banned by this bill, there are similar products already available in the US that are free from these substances, indicating alternatives are readily available.^v

A6424A/S6055B present an opportunity for New York to protect consumers while FDA refuses to act.

^v For example, CSPI found examples of foods—including packaged macaroni and cheese, soups, pastries, cheese, gravy, kids' meals, snack mixes, and cookies—that contain titanium dioxide and then identified comparable counterparts for each product that does not contain titanium dioxide. See here: <https://www.cspinet.org/cspi-news/titanium-dioxide-which-foods-contain-harmful-additive>. A prior version of this factsheet referenced the availability of products on the EU market. This version has been revised to focus on the US market.

Table 1. Summary of food additives to be banned by New York A6424A/S6055B

Chemical	Health Concerns	Function in Food ^{8,9,10}	Estimated Prevalence in US Foods and Beverages ^{11,vi}	Banned in the EU or California? ^{vii,viii,12,13}
Azodicarbonamide (ADA)	Carcinogenic break-down product ^{ix} (WHO, 2006) ^{14,15,16}	Bleaching agent or flour-maturing agent	0.18%	Banned (EU)
Brominated Vegetable Oil (BVO)	Toxic effects on heart and thyroid and bioaccumulation (WHO, 1970; FDA, 2022) ^{17,18}	Stabilizer	0.16% ^x	Banned (EU, CA)
Butylated Hydroxyanisole (BHA)	Cancer (NTP, 1991) ¹⁹	Antioxidant	1.0% ^{xi}	Not banned
Potassium Bromate	Cancer (WHO, 1992) ²⁰	Bleaching agent or flour-maturing agent	0.13%	Banned (EU, CA)
Propylparaben	Reproductive toxicity and hormone disruption (EFSA, 2004) ²¹	Preservative	0.08% ^{xii}	Banned (EU, CA)
Red 3	Cancer (FDA, 1990) ²² Neurobehavioral problems (California OEHHA, 2021) ²³	Coloring	2.0% ^{xiii}	Banned (CA) Only allowed in certain cherries (EU) ^{xiv}
Titanium Dioxide (TiO ₂)	DNA damage and bioaccumulation (EFSA, 2021) ²⁴	Coloring	2.9% ^{xv,25}	Banned (EU)

For more information, please contact the Center for Science in the Public Interest at policy@cspinet.org.

^{vi} Estimates were generated from the US Department of Agriculture's Branded Food Products Database; we searched the database on 23 February 2024 for each chemical to determine the number of US products listing each chemical as an ingredient, and we then divided these counts by the total number of US products in the database (449,787 products).

^{vii} All approved food additives in the EU are listed in Annex II of the European Commission's food additive regulation. The European Commission maintains Annex II as a database, which is accessible at: https://food.ec.europa.eu/safety/food-improvement-agents/additives/database_en and searchable at <https://ec.europa.eu/food/food-feed-portal/screen/food-additives/search>. Absence from this list indicates the substances is banned from use as a food additive in the EU.

^{viii} The bans in California resulting from the California Food Safety Act go into effect in 2027.

^{ix} Azodicarbonamide breaks down into ethyl carbamate (urethane) which has carcinogenic potential according to the US National Toxicology Program and the World Health Organization.

^x Search terms included: "brominated vegetable oil," "BVO", "brominated soybean oil," and "brominated soy oil."

^{xi} Search terms included: "butylated hydroxyanisole" and "BHA."

^{xii} Search terms included: "propylparaben" and "propyl paraben."

^{xiii} Search terms included: "red 3" and "red no. 3."

^{xv} Red 3 goes by the name erythrosine in the EU.

^{xv} This is an underestimate of the prevalence of titanium dioxide in US foods because federal law allows food manufacturers to list titanium dioxide under the vague term "artificial color" in certain circumstances.

References

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