

**The Florida Senate**  
**BILL ANALYSIS AND FISCAL IMPACT STATEMENT**

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

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Prepared By: The Professional Staff of the Committee on Agriculture

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BILL: SB 560

INTRODUCER: Senator Martin

SUBJECT: Chemical Additives in Food Products

DATE: February 28, 2025

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Burse	Becker	AG	<b>Favorable</b>
2.			AEG	
3.			FP	

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**I. Summary:**

SB 560 prohibits food establishments from manufacturing, selling, or distributing a food that contains specified chemical additives.

The bill also provides penalties for violations of this act.

The bill takes effect July 1, 2025.

**II. Present Situation:**

**Food Establishments**

The Florida Department of Agriculture and Consumer Services (department) regulates the commercial food supply for compliance with state and federal regulations to minimize the risk of foodborne illness in food products processed, produced, stored, distributed, and sold in both retail and wholesale food businesses within the state of Florida.<sup>1</sup>

Regulated establishments include supermarkets and grocery stores, convenience stores, coffee shops, bakeries, retail meat markets, seafood markets, juice and smoothie bars, bottled water plants, ice and water vending machines, all food processing plants, food warehouses, food salvage stores, and certain mobile food units selling only prepackaged foods or non-potentially hazardous food items.<sup>2</sup>

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<sup>1</sup> *Food Establishments*, FDACS, available at <https://www.fdacs.gov/Business-Services/Food/Food-Establishments> (last visited Feb. 24, 2025).

<sup>2</sup> *Id.*

Florida law defines a food establishment as a factory, food outlet, or other facility manufacturing, processing, packing, holding, storing, or preparing food or selling food at wholesale or retail.<sup>3</sup>

### **Brominated Vegetable Oil**

Brominated vegetable oil (BVO) is a vegetable oil modified with the chemical bromine that was previously used in food. BVO was mostly used in beverages to prevent citrus flavoring from floating to the top. In the 1960s, the Food Drug Administration (FDA) limited the use of BVO in foods to 15 parts per million.<sup>4</sup> Beverages with BVO additives were required to display “BVO” on the packaging. After research suggesting that consuming BVO may target the thyroid and increase tissue levels of bromine, the FDA reconsidered the safety of BVO as a food additive. As of July 3, 2024, the FDA no longer considered the use of BVO safe after the National Institutes of Health (NIH) found the potential for adverse health effects in humans. As such, the FDA no longer allows for its use in food.<sup>5</sup>

### **Potassium Bromate**

Potassium bromate is a food additive used as an oxidizing agent.<sup>6</sup> The chemical can be used for malting barley to produce fermented malt beverages or distilled spirits. The FDA limits potassium bromate to not exceed 75 parts per million of bromate. In addition to limitations, the FDA requires proper labeling such as the name of the additive and adequate directions for use.<sup>7</sup> Potassium bromate is also often used in baking as bromated flour and enriched bromated flour—limited to 50 parts to each million parts of the finished bromated flour.<sup>8</sup> In 1999, the International Agency for Research on Cancer found data that suggests potassium bromate is possibly carcinogenic to humans.<sup>9</sup> Furthermore, in 1998, the New Jersey Department of Health and Senior Services identify potassium bromate as a hazardous substance, leading to health hazards such as a cancer and affects to the nervous system.<sup>10</sup> While the FDA has not placed any further restrictions on the use of the chemical, The California Food Safety Act, which takes effect in 2027, bans potassium bromate.<sup>11</sup>

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<sup>3</sup> Section 500.03(1)(p), F.S.

<sup>4</sup> *Brominated Vegetable Oil (BVO)*, The Food and Drug Administration, (2024), available at <https://www.fda.gov/food/food-additives-petitions/brominated-vegetable-oil-bvo> (last visited Feb. 24, 2025).

<sup>5</sup> *Id.*

<sup>6</sup> Potassium Bromate, National Library of Medicine, available at <https://pubchem.ncbi.nlm.nih.gov/compound/Potassium-Bromate> (last visited Feb. 24, 2025).

<sup>7</sup> Title 21 Code of Federal Regulations § 172.730

<sup>8</sup> Title 21 Code of Federal Regulations § 137.155

<sup>9</sup> International Agency for Research on Cancer, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, *Some Chemicals that Cause Tumours of the Kidney or Urinary Bladder in Rodents and Some Other Substances*, Vol. 73, pp. 481-496 (1999), available at <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Some-Chemicals-That-Cause-Tumours-Of-The-Kidney-Or-Urinary-Bladder-In-Rodents-And-Some-Other-Substances-1999> (last visited Feb. 24, 2025).

<sup>10</sup> New Jersey Department of Health and Senior Services, Hazardous Substance Fact Sheet: Potassium Bromate (1998, revised 2005).

<sup>11</sup> California HSC Ch. 17 § 109025 (2023).

## Propylparaben

Propylparaben is a food additive recognized safe for use by the FDA, limited at a level not exceeding 0.1 percent in accordance with good manufacturing or feeding practice.<sup>12</sup> This chemical is mostly used as a preservative and antimicrobial agent by preventing the growth of microorganisms.<sup>13</sup> Research conducted by the Harvard School of Public health in 2013 suggests that the chemical is associated with fertility and reproductive issues.<sup>14</sup> While the FDA has not placed any further restrictions on the use of the chemical, The California Food Safety Act, which takes effect in 2027, bans propylparaben.<sup>15</sup>

## Red Dye 3

Red dye 3, referred to as FD&C Red No. 3 and formally known as the compound erythrosine, is a food additive used to synthetically dye foods a bright red color. The dye is mostly used in beverages, cereals, ice cream cones, frozen dairy desserts, and frosting.<sup>16</sup> To use color additives, manufacturers must submit a petition to the FDA requesting approval.<sup>17</sup> Based on the Delaney Clause of the Federal Food, Drug, and Cosmetic Act (FD&C Act), the FDA revoked approval of the use of red dye 3 due to its carcinogenic qualities found in rats.<sup>18</sup> The FDA issued the order on January 15, 2025, and it will take affect by January 2026.<sup>19</sup> In addition, the California Food Safety Act banned red dye 3.<sup>20</sup>

## Blue Dye 1

Blue dye 1, referred to as FD&C Blue No. 1, is a food additive used to synthetically dye foods blue. The dye is mostly used in beverages, cereals, frozen dairy desserts, and frosting.<sup>21</sup> The FDA approved blue dye 1 as safe for use to color foods under FDA regulations and generally in amounts consistent with good manufacturing practices. Products using blue dye 1 are subject to certification through batch certification and must be labeled as containing the dye.<sup>22</sup>

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<sup>12</sup> Title 21 Code of Federal Regulations § 184.1670.

<sup>13</sup> Title 21 Code of Federal Regulations § 170.3.

<sup>14</sup> Kristen W Smith, et al., *Urinary paraben concentrations and ovarian aging among women from a fertility center*, (2013), available at <https://pubmed.ncbi.nlm.nih.gov/23912598/> (last visited Feb. 24, 2025).

<sup>15</sup> California HSC Ch. 17 § 109025 (2023).

<sup>16</sup> *Color Additives Questions and Answers for Consumers*, The Food and Drug Administration, (2023), available at <https://www.fda.gov/food/color-additives-information-consumers/color-additives-questions-and-answers-consumers> (last visited Feb. 24, 2025).

<sup>17</sup> *FD&C Red No. 3*, The Food and Drug Administration, (2025), available at <https://www.fda.gov/industry/color-additives/fdc-red-no-3> (last visited Feb. 24, 2025).

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> California HSC Ch. 17 § 109025 (2023).

<sup>21</sup> *Color Additives Questions and Answers for Consumers*, The Food and Drug Administration, (2023), available at <https://www.fda.gov/food/color-additives-information-consumers/color-additives-questions-and-answers-consumers> (last visited Feb. 24, 2025).

<sup>22</sup> Title 21 Code of Federal Regulations § 74.101.

## Yellow Dye 5

Yellow dye 5, referred to as FD&C Yellow No. 5 and formally known as the chemical compound tartrazine, is a synthetic food dye used to dye foods yellow. The dye is mostly used in cereals, snacks, beverages, condiments, baked goods, and yogurt.<sup>23</sup> The FDA approved yellow dye 5 as safe for use to color foods under FDA regulations and consistent with good manufacturing practices. Products using yellow dye 5 are subject to certification through batch certification and must be labeled as containing the dye.<sup>24</sup>

## Benzidine

Benzidine is a manufactured chemical primarily used to produce dyes.<sup>25</sup> The FDA restricts benzidine to no more than 1 part per billion in certain food dyes, such as yellow dye 5 and yellow dye 6 and no more than 20 parts per billion for dyes such as red dye 33.<sup>26</sup> The chemical may result in adverse effects such as skin allergies. In addition, the Department of Health and Human Services (DHHS), the World Health Organization (WHO), and the EPA deemed benzidine a human carcinogen.<sup>27</sup>

## Butylated Hydroxyanisole

Butylated hydroxyanisole (BHA) is an antioxidant used in foods to prevent rancidity of fats and oils. BHA is mostly used in foods such as dehydrated potato shred, active dry yeast, beverages and desserts from dry mixes, and breakfast cereal. BHA is commonly used alone or in combination with Butylated hydroxytoluene (BHT). The FDA limits total Butylated hydroxyanisole by parts per million specific to each food.<sup>28</sup> In addition, packaging must show labeling for the chemical.<sup>29</sup> Research from the International Agency for Research on Cancer found evidence that BHA causes cancer in animals; however, no data was available to conclude BHA is a human carcinogen.<sup>30</sup>

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<sup>23</sup> *Color Additives Questions and Answers for Consumers*, The Food and Drug Administration, (2023), available at <https://www.fda.gov/food/color-additives-information-consumers/color-additives-questions-and-answers-consumers> (last visited Feb. 24, 2025).

<sup>24</sup> Title 21 Code of Federal Regulations § 74.705.

<sup>25</sup> Agency for Toxic Substances and Disease Registry, ToxFAQs™ for Benzidine, (2011), available at <https://www.cdc.gov/TSP/ToxFAQs/ToxFAQsDetails.aspx?faqid=568&toxid=105> (last visited Feb. 24, 2025).

<sup>26</sup> Title 21 Code of Federal Regulations § 74.705, § 74.706, § 74.1333.

<sup>27</sup> *Supra* 23

<sup>28</sup> International Agency for Research on Cancer, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, *Some Naturally Occurring and Synthetic Food Components, Furocoumarins and Ultraviolet Radiation*, Vol. 40, pp 125-127 (1986), available at <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Some-Naturally-Occurring-And-Synthetic-Food-Components-Furocoumarins-And-Ultraviolet-Radiation-1986> (last visited Feb. 24, 2025).

<sup>29</sup> Title 21 Code of Federal Regulations § 172.110.

<sup>30</sup> *Supra* 27

## Butylated Hydroxytoluene

Butylated hydroxytoluene (BHT) is an antioxidant used in foods to preserve and stabilize flavors, colors, and freshness.<sup>31</sup> BHT is mostly used in foods such as dehydrated potato shred, breakfast cereals, emulsion stabilizers for shortenings, potato flakes, and more. BHT is also used as an antioxidant and stabilizer in paper and plastic food packaging materials.<sup>32</sup> BHT is commonly used alone or in combination with Butylated hydroxyanisole (BHA). The FDA limits total Butylated hydroxytoluene by parts per million specific to each food.<sup>33</sup> In addition, packaging must show labeling for the chemical.<sup>34</sup> Research from the International Agency for Research on Cancer found no evidence that BHT causes cancer in humans.<sup>35</sup>

### III. Effect of Proposed Changes:

**Section 1** creates s. 500.454, F.S., to prohibit, beginning January 1, 2028, a food establishment from manufacturing, selling, or distributing a food that contains any of the following chemical additives:

- Brominated vegetable oil.
- Potassium bromate.
- Propylparaben.
- Red dye 3.
- Blue dye 1.
- Yellow dye 5.
- Benzidine.
- Butylated hydroxyanisole.
- Butylated hydroxytoluene.

The bill provides that a food establishment that violates this act is subject to a Class II administrative fine, pursuant to s. 570.971, F.S., for a first violation. For a second violation, a food establishment is subject to a Class III administrative fine.

**Section 2** provides that this act shall take effect July 1, 2025.

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<sup>31</sup> International Agency for Research on Cancer, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, *Some Naturally Occurring and Synthetic Food Components, Furocoumarins and Ultraviolet Radiation*, Vol. 40, pp 163 (1986), available at <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Some-Naturally-Occurring-And-Synthetic-Food-Components-Furocoumarins-And-Ultraviolet-Radiation-1986> (last visited Feb. 24, 2025).

<sup>32</sup> *Id.* pp. 164

<sup>33</sup> Title 21 Code of Federal Regulations § 172.115

<sup>34</sup> *Id.*

<sup>35</sup> International Agency for Research on Cancer, IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, *Some Naturally Occurring and Synthetic Food Components, Furocoumarins and Ultraviolet Radiation*, Vol. 40, pp 191 (1986), available at <https://publications.iarc.fr/Book-And-Report-Series/Iarc-Monographs-On-The-Identification-Of-Carcinogenic-Hazards-To-Humans/Some-Naturally-Occurring-And-Synthetic-Food-Components-Furocoumarins-And-Ultraviolet-Radiation-1986> (last visited Feb. 24, 2025).

**IV. Constitutional Issues:**

## A. Municipality/County Mandates Restrictions:

None.

## B. Public Records/Open Meetings Issues:

None.

## C. Trust Funds Restrictions:

None.

## D. State Tax or Fee Increases:

None.

## E. Other Constitutional Issues:

None.

**V. Fiscal Impact Statement:**

## A. Tax/Fee Issues:

None.

## B. Private Sector Impact:

May have indeterminate impact on food establishments who change food distributors to comply with this act.

## C. Government Sector Impact:

The Florida Department of Agriculture and Consumer Services may require additional staff to conduct food inspections to comply with this act.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill creates section 500.454 of the Florida Statutes.

**IX. Additional Information:**

- A. **Committee Substitute – Statement of Changes:**  
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

- B. **Amendments:**

None.

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This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

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