

As introduced, S.20 aims to offer a process for alternatives to bisphenols in food containers. Lack of clarity in this language could prevent safe, currently available alternatives from being used in the future. Without clarifying the language, passage of this legislation could interfere with the use of innovative and proven technology that currently meets the policy goal of S.20.

Most metal food or beverage containers sold today utilize an interior lining. Linings, or can coatings, are essential to protecting food safety and public health, as they prevent food spoilage and the occurrence of serious bacteria-related illnesses such as botulism. Despite widespread approval by European and American food safety agencies, some advocates and consumers have raised concern over ingredients, such as Bisphenol A (BPA), historically used in can linings. Many manufacturers have replaced these coatings in response to consumer demand. Until recently, it has been challenging in certain applications to use these alternative linings because they do not perform well with all foods and beverages. In response to both consumer and manufacturers' demands, the packaging coatings industry has developed innovative and technologically advanced can coatings that address both performance and lining ingredient concerns.

If S.20 were to pass in its current form, it could inadvertently prohibit the use of these non-BPA technologies and could push manufacturers away from metal containers, a food packaging material which is lightweight, easily recyclable and an important component of sustainable food packaging. With simple revisions, S.20 can meet its goal of protecting Vermont consumers and supporting the circular economy.

Innovative Can Coating Technology; Tested Safe by Leading Scientists and Reviewed by Consumer Safety Groups

Epoxy resin can linings containing Bisphenol A (BPA) have set the standard for performance in can coatings over the last 40 years. One alternative solution is Sherwin-Williams' valPure V70, a breakthrough series of non-BPA can coatings for food and beverage packaging that matches the performance benefits of traditional BPA-based coatings.

valPure V70 does not contain bisphenols or endocrine active ingredients in the final product. During an early point in the process of manufacturing valPure V70, a trace amount of tetramethyl bisphenol F (TMBPF) is present – but it is eliminated during the production process. TMBPF, which is non-endocrine active, is not a base ingredient of valPure V70 and is not present in the final product.

The absence of TMBPF has been validated by independent tests that did not detect the substance measuring down to 0.08 parts per billion (ppb). Sherwin-Williams encouraged toxicologists, third-party laboratories and independent research scientists to evaluate the estrogenic activity and migration profile of the monomers that compose valPure V70. Extensive reviews and testing (that went well beyond required regulatory approvals) have not detected any estrogenic activity or bisphenol migration in valPure V70 (and the ingredients used in valPure V70).

Following rigorous reviews of valPure V70's product characteristics, published scientific studies¹ and regulatory approvals, many consumer and health safety groups in Europe and North America have recognized it as a welcome advance in food contact technology. They have also acknowledged Sherwin-Williams' efforts to involve them in the review and approval process. These groups include The Center

¹ <https://sherwin-williams.app.box.com/s/yf7t38ohj95zfonbtojjddwgblbduw4dw>

for Science in the Public Interest, Natural Resources Defense Council, Clean Production Action, and Breast Cancer Prevention Partners.

“As an organization focused on breast cancer prevention, we were thrilled with Sherwin-Williams Packaging Coatings’ decision to include endocrine disruption and mammary end points in their safety testing protocol, and with their commitment to create a can lining that is free of estrogen activity,” said Janet Nudelman, Director of Program and Policy at Breast Cancer Prevention Partners. “We are hopeful Sherwin-Williams’ approach to safety testing and their transparency will set a new high bar for the food packaging industry.”

valPure V70 has been reviewed and approved for use by North American and European international regulatory agencies charged with regulating food contact materials. This includes the U.S. Food and Drug Administration, U.S. Environmental Protection Agency, Dutch G4 and Health Canada. V70 epoxy polymer was recently rated a benchmark 3 in the Green Screen, a chemical safety assessment developed by Clean Production Action.

Since 2018, valPure V70 has become a go-to solution in California as it meets the standards of The Safe Drinking Water and Toxic Enforcement Act of 1986, commonly referred to as Prop 65. According to one customer, “If it weren’t for Sherwin-Williams’ V70 technology, we would not have had any viable options to supply our product in cans in California.”

Suggested Revisions to Senate Bill No. 20

By developing valPure V70, Sherwin Williams has met consumer demand for non-BPA options in light-metal packaging. It is important for the Health and Welfare Committee to revise S.20 to clarify how bisphenols are attributed to these products. Without the below suggested revisions to S.20, the bill could inadvertently eliminate new technologies that currently meet the intent of the legislation.

Beginning on page 7, line 18, S.20 gives the Vermont Department of Health the authority to ban bisphenols in food containers after

...the Department has determined that a safer alternative is readily available in sufficient quantity and at a comparable cost and that the safer alternative performs as well as or better than bisphenols in a specific application of bisphenols to a food package or the packaging component of a food package.

valPureV70 was designed for this purpose and Sherwin Williams believes that it meets the goals stated above. However, there is a lack of clarity in two areas of the bill which will prevent the approval of safe and effective alternatives.

Definition of “bisphenol”

Current language, Sec. 2 § 1671

(1) “Bisphenols” means any member of a class of industrial chemicals that contain two hydroxyphenyl groups. Bisphenols are used primarily in the manufacture of polycarbonate plastic and epoxy resins.

This definition was added to the bill in the Senate Health and Welfare Committee without accompanying testimony by a witness, although it was mentioned that a college professor had offered it. If the goal of this legislation is to phase out chemicals which have been found to be concerning, banning products

which have been tested extensively by third parties for safety would counteract the overall intent of the legislation by removing safe alternatives from the market.

Endocrine disruption has been an area of controversy relating to some bisphenols, and we believe that the definition should address that type of chemical specifically. We understand the advocates' intent of broadening definitions beyond regulating single chemicals, and we offer the following definition in that spirit.

Suggested revision, Sec. 2 § 1671

- (1) "Bisphenols" means endocrine active industrial chemical compounds used primarily in the manufacture of polycarbonate plastic and epoxy resins in which bisphenols are present in any amount greater than an incidental presence.**

The use of "intentionally added"

The definition of this term is unclear to our scientific and regulatory staff, as well as our customers. Ultimately, products are verified through tests for the **presence** of chemical compounds, and we request that the language reflects that scientific practice.

Suggested Revision, Sec. 2 § 1672 (b):

Pursuant to 3 V.S.A chapter 25, the Department may adopt rules prohibiting a manufacturer, supplier, or distributor from selling or offering for sale or for promotional distribution a food package or the packaging component of a food package ~~to in~~ which bisphenols **are present** ~~have been intentionally added~~ in any amount greater than an incidental presence.