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BILL



ANALYSIS

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Senate Bill 240 (as enrolled)
Sponsor: Senator Rick Jones
Senate Committee: Regulatory Reform
House Committee: Regulatory Reform

Date Completed: 10-19-15

RATIONALE

"Powdered alcohol" refers to alcohol that is in powder form; specifically, it is ethanol contained within a microcapsule generally derived from simple or complex polysaccharides. Internationally, powdered alcohol has been used as an additive in foods or to create novelty alcoholic beverages for over 30 years, while its use in the United States has been rare. Recently, however, labeling for a brand of powdered alcohol that will be marketed for consumption was approved by the Alcohol and Tobacco Tax and Trade Bureau (TTB), in the U.S. Treasury Department. Some have raised concerns that allowing the consumption of powdered alcohol would contribute to a number of public health risks already associated with alcohol consumption. In addition, they contend that the sale and use of powdered alcohol would create problems not associated with currently available forms of alcohol. To address these concerns, it has been suggested that the sale, possession, or use of powdered alcohol within Michigan should be banned.

CONTENT

The bill would amend the Michigan Liquor Control Code to do the following:

- **Prohibit a person from using, possessing, or selling powdered alcohol.**
- **Make an exception to the prohibition for a hospital, State institution, private college or university, or pharmaceutical or biotechnology company conducting research.**

Specifically, except as provided below, the bill would prohibit a person from using or offering for use, possessing, selling, or offering for sale powdered alcohol. A person who violated the prohibition would be guilty of a misdemeanor punishable as provided in Section 909 of the Code.

(That section specifies that a person, other than a person required to be licensed under the Code, who violates the Code is guilty of a misdemeanor. Under the Michigan Penal Code, a misdemeanor for which a penalty is not specified is punishable by up to 90 days' imprisonment and/or a maximum fine of \$500. The Michigan Liquor Control Code further specifies that, except as otherwise provided, a licensee who violates the Code, or a rule or regulation promulgated under the Code, is guilty of a misdemeanor punishable by imprisonment for up to six months or a maximum fine of \$500, or both.)

The bill would not apply to a hospital that operated primarily for the purpose of conducting scientific research, or a State institution, a private college or university, or a pharmaceutical or biotechnology company, if the institution, college or university, or company were conducting bona fide research.

"Powdered alcohol" would mean alcohol that is sold in powder form for either direct use or reconstitution.

The bill would take effect 90 days after its enactment.

BACKGROUND

The term "powdered alcohol" refers to molecularly encapsulated ethanol (ethanol that is contained within a synthetic carbohydrate). It has been known since the 1970s that ethanol can be absorbed by short chains of sugars, or dextrans, to form a powder. For example, by combining a high-proof spirit with maltodextrin derived from tapioca (commercially available as N-Zorbit), a homemade version of powdered alcohol can be made.¹ Current powdered alcohols likely use cyclodextrins, a group of compounds composed of sugar molecules bound in a rings, to manufacture the powder.

While not readily available in the United States, powdered alcohol is available in other countries. In the 1970s and early 1980s, Japan's Sato Food Industries experimented with and began selling encapsulated alcohol as an additive for various foods.² In 2005, an alcoholic powder product called Subyou was marketed briefly in Germany. The product cost \$2 to \$3 for a packet, and contained 4.8% dry alcohol.³ In 2007, Dutch students at Helicon Vocational Institute developed a powdered alcohol called Booz2Go. Mixed with water, the powder yielded a flavored drink with 3% alcohol content.⁴

In March 2015, Lipsmark LLC received approval from the TTB for its labels of Palcohol, a powdered alcohol product.⁵ Palcohol will be sold in a pouch with approximately one ounce of powder, and in some instances, flavorings and sweeteners.⁶ Used as directed, six ounces of water are added to the powder in order to make a drink with approximately 10% alcohol content (approximately one shot of alcohol). Lipsmark plans to release five versions of Palcohol: vodka, rum, and three different cocktails (cosmopolitan, powderita—a margarita flavor, and lemon drop), and intends to begin selling Palcohol in summer of 2015.⁷

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

Powdered alcohol poses a number of risks and has great potential for abuse. Other states recognize this: As of June 2015, 20 states had statutorily prohibited powdered alcohol and two additional states had enacted one-year bans, according to the National Conference of State Legislatures. Alcohol in powdered form could be sneaked easily into schools, theaters, stadiums, and other locations. Powdered alcohol could be inhaled or used to make highly concentrated drinks. Because powdered alcohol is designed to be dissolved in liquids, there is a risk that someone could spike another person's drink. In addition, powdered alcohol could be dangerous for children. Manufacturers could use packaging and marketing that appeal to minors. Young children, especially, could be attracted to powdered alcohol because of its colorful packaging and, thinking it was a kid's snack, consume dangerous, perhaps fatal, amounts of it.

Opposing Argument

Powdered alcohol carries few risks that liquid alcohol does not already involve. Since Prohibition was repealed, it has been recognized that adults can make their own decisions regarding alcohol consumption, and it is generally accepted that individuals should consume alcohol responsibly. Banning powdered alcohol because there is a possibility that a few individuals might misuse it

¹ This was demonstrated recently in *Popular Science*, "How to Make Powdered Booze at Home", 4-21-2014.

² See Sato Food Industries, "Products: Powdered Alcohol".

³ "The Surprising History of Making Alcohol a Powdered Substance", *Smithsonian*, 5-7-2014.

⁴ "Just add water - students invent alcohol powder", *Reuters*, 6-6-2007.

⁵ "'Palcohol' powdered alcohol wins federal approval", *CBS News*, 3-11-2015. The labels were previously approved in April 2014, but the approval was withdrawn within weeks for discrepancies. As of March 10, 2015, the TTB reissued its approval of the submitted labels.

⁶ "F.A.Q.", www.palcohol.com/.

⁷ *Id.*

would be unreasonable, especially when other products pose the same risks and there are a number of legitimate uses for powdered alcohol.

The risk of spiking someone's drink with powdered alcohol is minimal, as current formulations require vigorous stirring or shaking for half a minute (or longer, if the drink is cold). A drink spiked with powdered alcohol likely would have a noticeable difference in volume, taste, and appearance, and would have only the alcohol content of a standard drink. Other substances, such as liquid alcohol, dissolve much more quickly in a drink. Creation of a highly concentrated drink would be difficult because only a certain amount of the powder would dissolve before the drink became a thick slurry. Inhaling powdered alcohol also would be highly impractical as the powder would burn, it would take quite some time to inhale any meaningful amount of the powder, and its intoxication effect likely would be minimal.

Also, if powdered alcohol is not outlawed, the manufacturers of Palcohol or other brands will have to apply to the Michigan Liquor Control Commission for approval to market it in the State. Thus, if it were approved, minors attempting to acquire and consume powdered alcohol would face generally the same difficulties as they do obtaining liquid alcohol because powdered alcohol sales would be subject to the same restrictions. Moreover, it likely would not be a first choice for underage drinkers because it would be more costly.⁸ Although powdered alcohol could pose a risk to children (or anyone who abuses it), it is the responsibility of parents to keep harmful products out of the reach of children.

Finally, powdered alcohol could be useful in a variety of activities and industries. It could be convenient for those who go hiking or camping, or engage in other activities where the weight of equipment and supplies is a consideration. Other beneficial uses in the medical and hospitality industries could be proscribed by a ban. A ban also would eliminate tax revenue from product sales.

Legislative Analyst: Jeff Mann

FISCAL IMPACT

The bill could result in a marginal increase in misdemeanor penalties associated with violations involving powdered alcohol. The bill would not have a significant impact on State and local criminal justice costs.

Fiscal Analyst: John Maxwell

⁸ The manufacturers of Palcohol state that it would cost four times more than liquid alcohol for the same amount. "Palcohol: Home", www.palcohol.com/.

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.