

February 15, 2024

The Honorable James F. Gennaro
Councilman, New York City Council
Committee on Environmental Protection, Resiliency and Waterfronts
250 Broadway Suite 1773
New York, NY 10007

Dear Councilman Gennaro,

SciPinion is providing this letter to help inform the proposed legislation to amend the administrative code of the city of New York in relation to the prohibition on the sale of laundry and dishwasher pods and sheets using polyvinyl alcohol.

SciPinion regularly assembles panels of the world's experts to review science and help inform important issues facing society and decision makers. We have assembled a panel of experts to help inform this debate on polyvinyl alcohol and we respectfully offer these comments to help you make a more informed decision.

Unfortunately, a flawed study (Rolsky and Kelkar, 2021¹) is being used to mischaracterize and spread misinformation and falsehoods about the use of polyvinyl alcohol (PVA) used in unit dose measure detergents. SciPinion (an independent science and research firm) and the U.S. Environmental Protection Agency (U.S. EPA) have both confirmed that the Rolsky And Kelkar study is fundamentally flawed.

SciPinion assembled a panel of eight independent experts in biodegradation and wastewater treatment plants to take part in an expert peer review of the Rolsky and Kelkar (2021) study to determine the validity of the authors' conclusions and claims. These experts found fundamental flaws in Rolsky and Kelkar's assumptions, models and conclusions, particularly those associated with scaling screening level test results to real-world conditions. Based on this expert peer review, it is the conclusion of SciPinion that Rolsky and Kelkar (2021) is not a valid modeling effort, and that polyvinyl alcohol is readily biodegradable and does not degrade into microplastics.

Our conclusions are similar to those made by the US EPA (EPA, 2023)². Importantly, the U.S. EPA has concluded that:

¹ Rolsky C, Kelkar V. Degradation of Polyvinyl Alcohol in US Wastewater Treatment Plants and Subsequent Nationwide Emission Estimate. Int J Environ Res Public Health. 2021 Jun 3;18(11):6027. doi: 10.3390/ijerph18116027. PMID: 34205161; PMCID: PMC8199957.

² Environmental Protection Agency (EPA). 40 CFR Chapter I: Polyvinyl Alcohol (PVA); TSCA Section 21 Petition for Rulemaking; Reasons for Agency Response; Denial of Requested Rulemaking. [EPA-HQ-OPPT-2022-0923; FRL-10453-01-OCSP]]

- PVA readily passes the established tests for biodegradability
- “Chemicals that pass ready biodegradation tests are projected to have half-lives of a few hours in sewage treatment plant sludges and half-lives of a few days in water”
- “The PVA structures used in Safer Choice-certified detergent products are highly water-soluble, have low potential to bioaccumulate in biota, and do not meet the European Chemicals Agency’s (ECHA) definition of a microplastic”
- “The PVA structures used in detergent films in Safer Choice-certified products do not degrade into microplastics.”

EPA previously rejected a petition by Blueland and other organizations asking the EPA to remove polyvinyl alcohol from the Safer Chemical list. EPA found their petition was without merit and EPA reaffirmed that in fact polyvinyl alcohol is readily biodegradable, does not form microplastics and is a “Safer Chemical.”

Based on our own panel review and EPA’s response to the Blueland petition, SciPinion reaffirms our scientific position statement that: (1) polyvinyl alcohol is readily biodegradable; and (2) efforts to limit or ban polyvinyl alcohol using the flawed study of Rolsky and Kelkar (2021) are misguided.

We founded SciPinion to serve as a resource to decision makers. Not all decision makers have advanced science training, yet are still needed to make important decisions for society that rely on the scientific record. We hope that our comments help you make scientifically justified decisions and welcome the opportunity to provide testimony outlining our approach and findings on this matter.

Respectfully,



Sean M. Hays, PhD
President
SciPinion

About SciPinion | scipinion.com

SciPinion was created with the mission to help companies, governments, and consumers make better decisions by understanding the collective wisdom of the world’s experts, and to make science more trusted by all. Far too often, important debates about important scientific issues are inflamed by activists, competing research groups, or sometimes simply because the science on a specific issue has some uncertainty. That type of environment can lead to reactionary decisions by regulators or can fuel litigation. In some situations, experts who share their opinions on these controversial topics are attacked. By creating an environment whereby experts can share their opinions in a psychologically safe environment, SciPinion has created a safe haven for experts to share their true opinions without influence and we are putting this to work to help inform the most important science issues facing society. Learn more about our [process and philosophy here](#).