

Diacetyl Update: What's In Your Product?

Article By:

J. David Brittingham

Douglas J. Feichtner

In a recent study published in [Environmental Health Perspectives](#), *Harvard* public health researchers selected 51 types of flavored e-cigarettes sold by leading e-cigarette brands. The objective of the study was to determine if the flavoring chemicals diacetyl, acetoin, and 2,3-pentanedione – each of which have been associated with severe respiratory disease in microwave popcorn workplaces and consumers across the U.S. – were present in the vapors released from flavored e-cigarettes. The researchers found at least one of these flavoring chemicals in 47 of the 51 flavors tested. Diacetyl was found in 39 flavors tested, while acetoin and 2,3-pentanedione were detected in 46 and 23 of the flavors, respectively.

The Harvard study does not make a definitive statement about the effect of these flavoring chemicals in e-cigarettes. However, it should encourage manufacturers, suppliers, retailers or sellers of all products (not just e-cigarettes) containing diacetyl, acetoin, or 2,3-pentanedione to pay close attention to this study and new exposure to flavoring chemicals. Two points should be considered:

Know what's in your product. According to the Harvard researchers, none of the websites or packaging for the flavoring e-cigarette brands in the study mentioned any potential hazards associated with inhaling flavoring chemicals. Two companies apparently stated that their products did not contain diacetyl in written communication, yet the researchers found diacetyl in their product. The health concerns related to inhaling diacetyl and other flavoring chemicals are well recognized, and the flavoring industry (through The Flavoring and Extract Manufacturers Association of the U.S.) even recommends warning language for flavors containing diacetyl and other chemicals heated during processing. While reasonable people can disagree whether the lung disease linked to diacetyl in the microwave popcorn industry justifies warning labels on flavored e-cigarettes, not knowing what ingredients comprise your product qualifies as its own hazard. If you don't know what chemicals are in your product, you cannot properly consider whether warning labels or handling precautions are appropriate for the workplace or consumer using your product.

Lawsuits may not wait for science to catch up. The Harvard researchers do not make a definitive statement about the effect of diacetyl or flavoring chemicals in e-cigarettes. Indeed, the study authors conclude that "urgent action is recommended to further evaluate the extent of this new exposure to diacetyl and related flavoring compounds in e-cigarettes." While additional research on the effect of e-cigarette vapors on respiratory health, and identifying a safe exposure limit, are the next logical steps,

ambitious plaintiffs' attorneys may not wait. Reports of serious lung disease in microwave popcorn workers exposed to diacetyl and other flavoring chemicals are well-documented. Some of those workers were awarded million-dollar jury verdicts. In 2012, a jury in a Colorado federal court awarded a microwave popcorn *consumer* millions of dollars for purportedly contracting lung disease caused by inhaling diacetyl vapors from microwave popcorn bags popped in his own microwave. Of course, similar claims have been defeated. But given the success of past lawsuits and the current lack of data on the exposures and potential health effects involving the use of flavored e-cigarettes, it is not difficult to envision how the Harvard study could be manipulated by attorneys to fit the contours of a new species of diacetyl litigation.

If you manufacture, supply, or sell products containing diacetyl or flavoring chemicals in general, we encourage you read this new Harvard study, stay abreast of any further phases of their research, and know that Dinsmore has the knowledge and experience to assist as needed.

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