

Environment Canada

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Backgrounder

Siloxanes D4, D5 and D6

Siloxanes are an ingredient found in most personal care products on the market in Canada. They are also used in many other applications such as textiles, paints and coatings, antiperspirants, sealants, lubricants, plastics, non-medical ingredients in pharmaceuticals, silicone polymers, food additives, surface treatments for wounds, and medical devices.

Three types of siloxanes (D4, D5 and D6) were assessed as part of Batch 2. The draft screening assessments were published on May 17, 2008. The final assessments reflect new information that was received during the Challenge process.

The final assessments conclude that siloxanes are not a concern for human health, based on the amount of these substances that an individual would be exposed to through the use of various products, including personal care products.

However, siloxanes D4 and D5 are widely used in products across Canada, and therefore are entering the environment in relatively large quantities, stay in the environment a long time (persistent), and may harm fish and aquatic organisms. To limit the amount of D4 and D5 that is released to the environment, the Government of Canada is proposing to set a concentration limit for D4 and D5 in products.

This will minimize the amount of D4 and D5 in personal care products that is released to municipal wastewater streams when they are washed off. The Government is also proposing to regulate the amount of these substances that are released to the environment through wastewater from the manufacturing process. D4 and D5 will also be added to Schedule I of the Canadian Environmental Protection Act, 1999.

Siloxanes are also present in therapeutic products such as medicated shampoo and sunscreen. Consumers can continue to use these products as directed, and these uses are not targeted for further action.

The final assessment concludes that D6 is currently not of concern to the environment. New information received through the assessment and comment process showed that the D6 does not react in the environment the same way as D4 and D5.

The science on chemical substances is constantly evolving, and the Government of Canada will continue to review new information as it becomes available to determine if any further actions are needed to manage the risks posed by these substances.

Taken from:

<http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=546F7166-9C61-4CA5-BB67-804EC3F2A0ED>