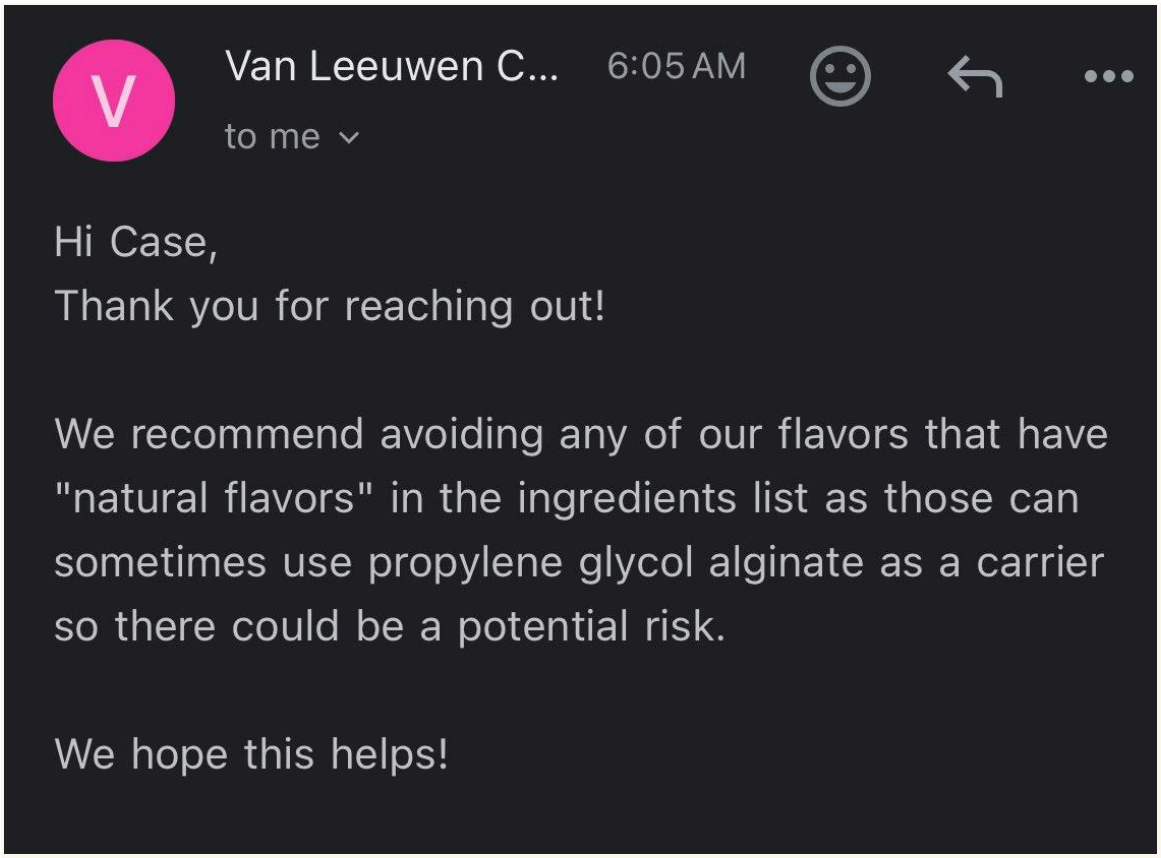
Propylene Glycol Synthetic Substance found in Ice Cream

Synthetic substances derived from crude oil could be in your ice cream

Introduction

Van Leeuwen Ice Cream has recently faced scrutiny regarding its use of propylene glycol (PG), a synthetic compound commonly found in various industrial applications, including antifreeze and polyester. The inclusion of PG in some commercial ice cream brands has raised questions about the safety and necessity of this ingredient in our beloved frozen treats.



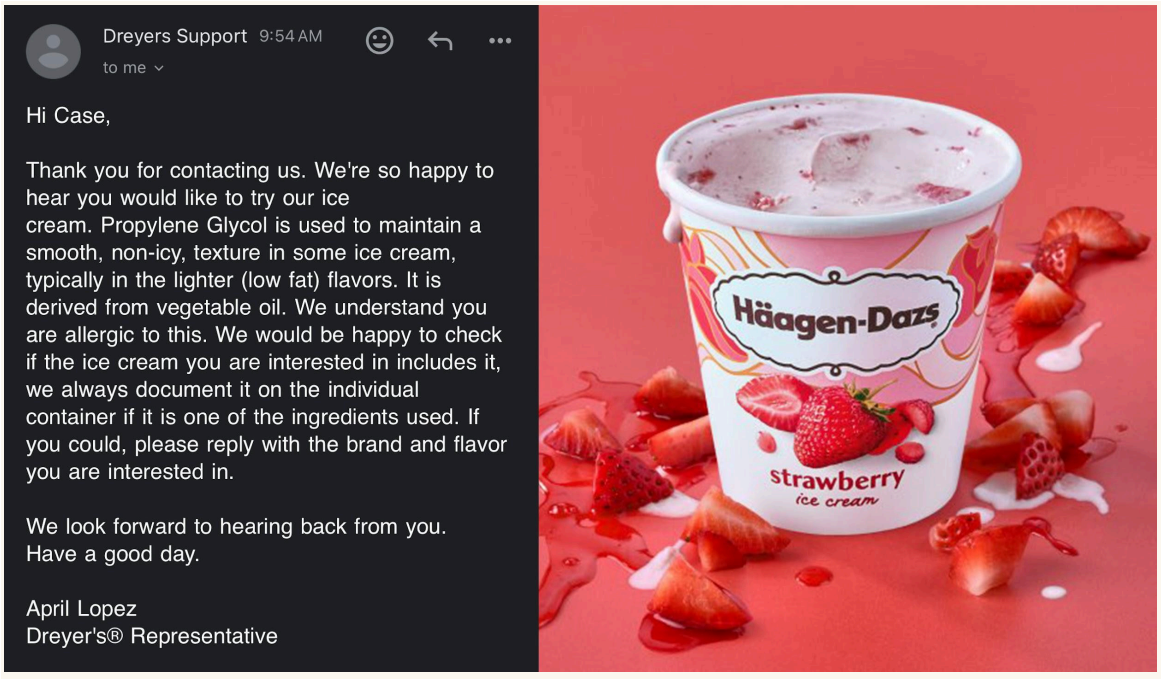
Van Leeuwen recommends avoiding ice cream flavores without "natural flavors" as those can sometimes use propylene glycol alginate as a carrier.

What is Propylene Glycol?

Propylene glycol is a colorless, odorless liquid that is generally recognized as safe (GRAS) by the FDA when used in food products. It is often utilized as a stabilizer or thickening agent in various food applications, including ice cream, to improve texture and prevent ice crystal formation. However, the fact that it is derived from crude oil and is also used in non-food products like antifreeze has sparked concern among consumers about its presence in food items, especially ice cream. It is more stricly reuglated in the European Union where propylene glycol (E1520) is allowed as a food additive, with a maximum level of 1,000 mg/kg in final food products.

The Ice Cream Landscape

Many commercial ice cream brands, including Häagen-Dazs, which is owned by Dreyer's, incorporate propylene glycol in certain flavors to enhance the creaminess and spoonability of their products straight out of the freezer.



In contrast, brands like Straus Family Creamery have opted to avoid using PG, instead focusing on traditional methods and natural ingredients to create their ice creams.

Other brands that don't use propylene glycol include:

- Ice Cream For Bears
- Alec's Ice Cream
- I Like It Raw

- Van Leeuwen (without natural flavors)

The debate over what constitutes "real" ice cream often centers on the ingredients used. Homemade ice cream, made with fresh cream, milk, and eggs, is frequently touted as a healthier alternative to mass-produced varieties that rely on cost-effective factory ingredients.

Health Implications of Propylene Glycol

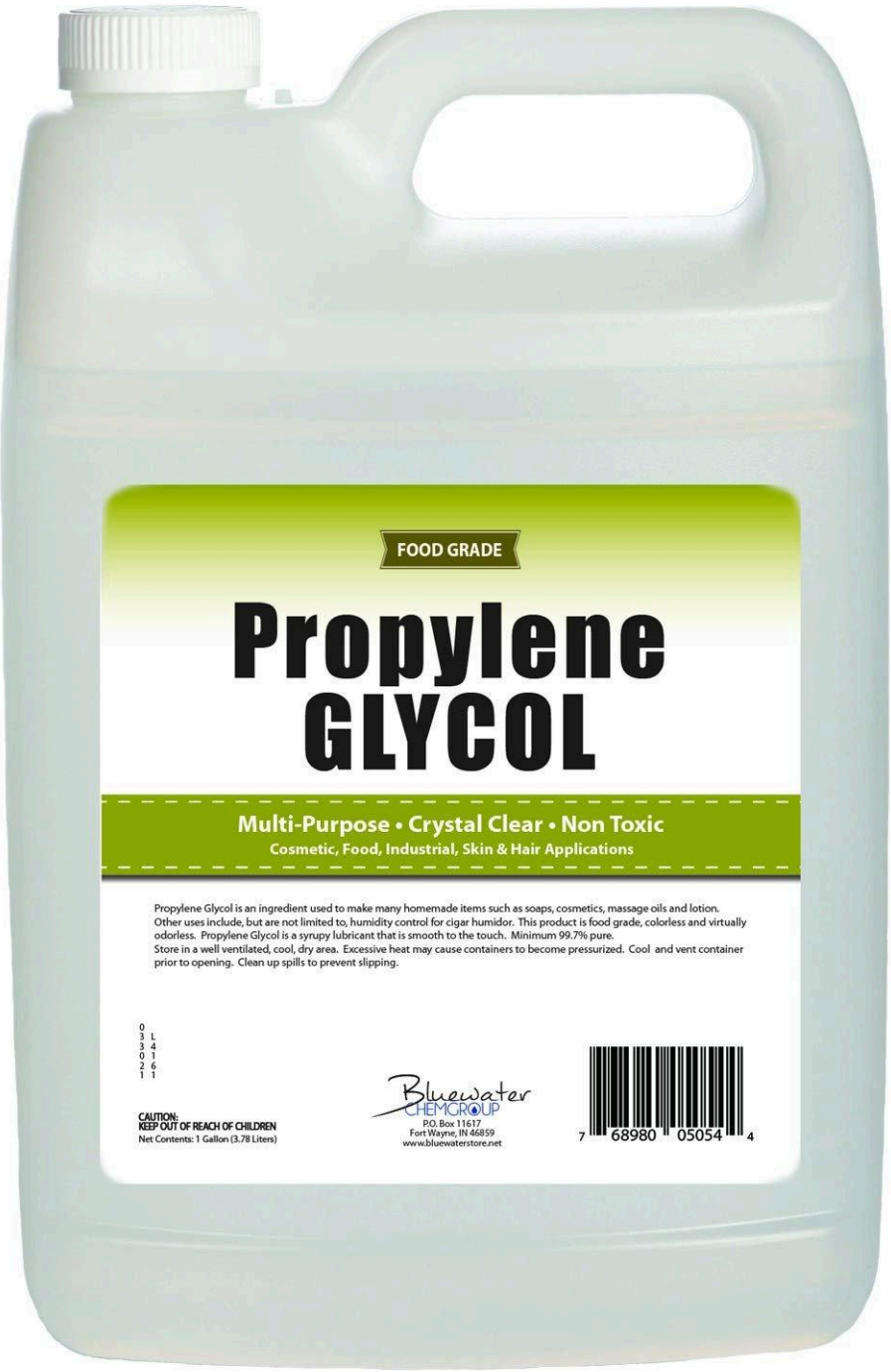
While propylene glycol is deemed safe for consumption in regulated amounts, concerns persist regarding its long-term health effects.

Some studies suggest that excessive consumption of PG can lead to health issues, including potential allergic reactions and gastrointestinal disturbances.

One study reported that propylene glycol can cause CNS toxicity, hyperosmolarity, hemolysis, cardiac arrhythmia, seizures, agitation, and lactic acidosis, particularly when administered intravenously or ingested in large amounts. For instance, a 15-month-old boy experienced severe symptoms, including unresponsiveness and hypoglycemia, after receiving high doses of vitamin C suspended in PG.

Another study found chronic exposure to high levels of propylene glycol may affect kidney function. The New Jersey Department of Health's Hazardous Substance Fact Sheet mentions that prolonged or repeated contact can lead to skin irritation and potentially impact the kidneys.

In Europe, food regulations are stricter, and the use of PG in food products is more closely monitored compared to the United States. This discrepancy raises questions about the safety standards applied to food products in different regions.



Thankfully healthy livers and kidneys can easily remove some PG from your body and the rest is broken down into lactic acid. But in large quantities, lactic acid can build up and lead to kidney failure and acidosis. Acidosis means your body can’t remove the acid as fast as it should, leading to toxicity (poisoning).

It's not just ice cream

Food-grade PG can also be found in products like seasonings, soup blends, teas, soft drinks, and baking mixes. It keeps powdered ingredients from caking up, protects them against moisture, and enhances flavor.

Examples of packaged foods that contain the product include:

- Seasoning blends
- Dried soups
- Salad dressings
- Baking mixes for cakes, muffins, biscuits, pancakes, etc.
- Powdered drink mixes
- Flavored teas
- Soft drinks
- Alcoholic beverages
- Food coloring
- Flavoring extracts
- Highly processed snacks
- Fast foods
- Flavored popcorn
- Cake frosting
- Ice cream flavors
- Mass-distributed baked desserts
- Marshmallows
- Dried coconut shreds
- Sauces
- Sour cream
- Potato salad

Steps you can take to limit your PG intake

While propylene glycol is common in processed foods and generally considered safe by the FDA, some individuals prefer to minimize their intake. Here are practical steps you can take:

- Become a label detective: Scrutinize ingredient lists for "propylene glycol," "propylene glycol mono and diester," or "E1520."
- Avoid "Natural flavors" on food labels

- Embrace home cooking: Prepare more meals from scratch using whole ingredients. This gives you full control over what goes into your food.
- DIY condiments and mixes: Try making your own salad dressings, seasoning blends, and baking mixes instead of buying pre-made versions.
- Prioritize whole foods: Fill your diet with fresh fruits, vegetables, lean proteins, and whole grains, which naturally don't contain PG.
- Choose minimally processed alternatives: When buying packaged foods, opt for those with shorter, simpler ingredient lists.
- Be mindful of non-food sources: Remember that PG can also be found in personal care products and medications.
- Stay informed: Keep up with the latest research and guidelines regarding PG in food to make educated decisions.

By implementing these strategies, you can significantly reduce your PG consumption if that's a priority for you. Remember, the body typically processes PG efficiently, but taking these steps can provide peace of mind if you have concerns.

Consumer Awareness and Choices

The growing awareness of food ingredients has prompted consumers to seek out brands that prioritize transparency and natural ingredients. While propylene glycol serves a functional purpose in commercial ice cream production, the demand for cleaner, more natural ingredients is reshaping consumer preferences. Ultimately, the choice of whether to indulge in ice cream containing PG lies with the consumer, who must weigh the convenience and texture benefits against their health and ingredient preferences. The conversation surrounding ice cream ingredients is a reflection of broader trends in the food industry, where transparency and health consciousness are becoming increasingly important. As consumers become more informed, they will continue to drive change in the products they choose to enjoy.