

Fact Sheet: The Risks of Ordinary Cleaning Products

Ingredients that Jeopardize Wildlife, Ecosystems and Humans

Nonylphenol Ethoxylate (NPE)

A surfactant in many cleaning products, such as all-purpose cleaners and degreasers.¹ This petroleum byproduct is often considered excessive for everyday cleaning – some compare it to driving a thumb tack in with a sledgehammer.²

Harmful to Wildlife and Ecosystems

- *Persistent (nonbiodegradable)* – NPE reaches the water environment via the foul sewer system; an estimated 37% reaches the wider aquatic environment undegraded; 46% reaches the soil via sludge spreading on agricultural land; and only 17% is degraded or destroyed.³
- *A petroleum byproduct* – There are many well-known damaging effects on our environment from oil production and transportation, including air pollution, acid rain, oil spills, etc.
- *Toxic to aquatic life* – NPE is a known endocrine disruptor and has been linked to increased vitellogenic effects in fish.³

Harmful to Humans

- *Suspected to cause cancer and reproductive disorders* – Nonylphenol (NP), a breakdown product of NPE, has been shown to mimic the action of the female hormone estrogen. As such, it is suspected to contribute to an increase in reproductive organ disorders in men and to cause cancer, especially breast cancer.^{3,4}
- *Possible food contaminant* – The disposal of sewage sludge contaminated with NP on agricultural land may result in exposure to humans through food.³

Fragrances

Harmful to Humans

- *Formaldehyde* – Fragrances in cleaning products sometimes react with high levels of ozone in a room to form formaldehyde and dangerous fine particles indoors.⁵ The United States Environmental Protection Agency (EPA) classifies formaldehyde as a probable human carcinogen. It can also cause watering eyes, burning of the nose and throat, coughing, and difficulty in breathing.⁶
- *Asthma* – Particularly fragrances in cleaning compounds are suspected to cause asthma attacks.¹

Ammonia and Bleach

Harmful to Humans

- *Breathing problems* – Symptoms of obstructive lung disease have been related to the use of bleach and other irritant cleaning products.⁷ Individuals with asthma and emphysema may be particularly sensitive to ammonia.⁸

- *Can be deadly* – Never mix bleach or any bleach-containing product with any cleaner containing ammonia. The gases created from this combination can lead to chronic breathing problems and even death.⁵

References:

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