

This is the weekly bulletin of the TURI Library at the University of Massachusetts Lowell. Greenlist Bulletin provides previews of recent publications and websites relevant to reducing the use of toxic chemicals by industries, businesses, communities, individuals and government. You are welcome to send a message to [mary@turi.org](mailto:mary@turi.org) if you would like more information on any of the articles listed here, or if this email is not displaying properly.

## Designing the Next Generation of Hair Dyes

[Source: NC State University, January 17, 2018](#)  
Author: D'Lyn Ford

North Carolina State University researchers have created the largest publicly available chemical database of hair dye substances as a resource for developing a new generation of hair color products that are safer for consumers, stylists and the environment.

The online Hair Dye Substance Database contains detailed information about the structure and properties of 313 substances in current and past commercial hair dyes. Using computer-based classification -- what's known as cheminformatics -- researchers grouped the dyes into clusters with similar structures and properties. The results revealed some surprises and promising new avenues for research.

"The database can definitely help drive design, not just of hair dyes but of other types of dyes, using the same approach," says Tova Williams, NC State doctoral student and lead author of a journal article about the research.

[Read more...](#)

See original article in *ACS Sustainable Chemistry & Engineering*, "[Toward the Rational Design of Sustainable Hair Dyes Using Cheminformatics Approaches: Step 1. Database Development and Analysis](#)".

Also see from the *Journal of Agricultural and Food Chemistry*, "[Application of Anthocyanins](#)".

## In This Issue

### [Designing the Next Generation of Hair Dyes](#)

### [Recycled electrical products lead to hazardous chemicals appearing in everyday items](#)

### [Lowe's Drops Paint Strippers Blamed in Dozens of Deaths](#)

### [EU plastics pollution proposal 'fails to address' hazardous substances](#)

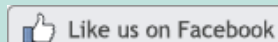
### [Chemicals Info Could Be Slow to Reach States, EMTs Under EPA Plan](#)

## [Join Our Mailing List](#)

## Quick Links

[Greenlist Bulletin Archives](#)

[TURI Website](#)

 Like us on Facebook

## Upcoming webinar: Safer Solutions for Methylene Chloride

**Tuesday, June 5, 2018  
12:00pm- 1:00pm**

TURI has been working with the U.S. EPA, the University of Massachusetts Lowell, paint stripper product manufacturers, and furniture refinishers to identify and evaluate solvent blends with equal or better paint stripping performance, comparable ingredient costs, and a safer environmental, health, and safety profile as compared to methylene chloride.

[from Blackcurrant \(\*Ribes nigrum\* L.\) Fruit Waste as Renewable Hair Dyes".](#)

This webinar will describe why methylene chloride is a higher hazard substance as designated by TURA and findings from the research into safer formulations.

**Register [here](#).**

## Recycled electrical products lead to hazardous chemicals appearing in everyday items

[Source: University of Plymouth, May 30, 2018](#)

Author: Alan Williams

Hazardous chemicals such as bromine, antimony and lead are finding their way into food-contact items and other everyday products because manufacturers are using recycled electrical equipment as a source of black plastic, according to a new study.

The substances are among those applied to devices, such as laptops and music systems, as flame retardants and pigments but remain within the products when they reach the end of their useful lives.

Now scientists at the University of Plymouth have shown that a combination of the growing demand for black plastic and the inefficient sorting of end-of-life electrical equipment is causing contaminated material to be introduced into the recycle.

[Read more...](#)

[See original study in \*Environment International\*, "Black plastics: Linear and circular economies, hazardous additives and marine pollution".](#)

[See article from \*EcoWatch\*, "Dangerous Chemicals From E-Waste Found in Black Plastics From Toys to Drink Stirrers".](#)

[See from \*Chemical Watch\*, "European researchers create database for chemicals in plastic packaging".](#)

## Lowe's Drops Paint Strippers Blamed in Dozens of Deaths

[Source: \*The New York Times\*, May 29, 2018](#)

Author: Eric Lipton

WASHINGTON -- Lowe's, the large home improvement retailer, announced Tuesday that it will no longer sell paint strippers that contain the chemicals methylene chloride and NMP, which have been blamed in dozens of accidental deaths.

The Obama administration, in its final days, concluded that the two chemicals represented "unreasonable risks" and moved to ban them for use as paint strippers. But the Environmental Protection Agency has not enacted the ban.

For now, Lowe's says it will voluntarily remove from its shelves 19 products that contain either of the chemicals, which go by such brand names as Klean Strip, Goof Off and Jasco, many of them made by W.M. Barr in Memphis, Tenn.

[Read more...](#)

[See from U.S. EPA, "EPA Announces Action on Methylene Chloride".](#)

*TURI's Note:* See a CBS News story on our work to find a safer alternative to methylene chloride, "[Researchers tout safer alternative to potentially deadly paint stripper chemical](#)". See our report, "[Assessment of Safer and Effective Alternatives to Methylene Chloride For Paint Stripping Products](#)". Also [register for our upcoming](#)

## EU plastics pollution proposal 'fails to address' hazardous substances

[Source: Chemical Watch, May 30, 2018](#)

The European Commission's recently announced draft laws to tackle plastics pollution fail to address the presence of hazardous substances used in single-use plastic products, an NGO has said.

The EU executive says it is targeting the ten such products most often found on Europe's beaches and seas, as well as lost and abandoned fishing gear. The new rules will introduce provisions including:

- plastic ban on certain products: this will apply to plastic cotton buds, cutlery, plates, straws, drink stirrers and sticks for balloons which will have to be made exclusively from more sustainable materials;
- consumption reduction targets: member states will have to reduce the use of plastic food containers and [beverage] cups;
- obligations for producers: they will help cover the costs of waste management and clean-up, as well as awareness-raising measures for packaging and food contact materials. Industry will also be given incentives to develop less polluting alternatives for these products; and
- awareness-raising measures: member states will be required to raise consumer awareness on the negative impact of littering from single-use plastics.

But the European Environmental Bureau (EEB) said that hazardous substances in the products must be addressed because they can "easily leak" into the environment and food chain.

[Read more...](#)

See the European Commission press release, "[Single-use plastics: New EU rules to reduce marine litter](#)".

## Chemicals Info Could Be Slow to Reach States, EMTs Under EPA Plan

[Source: Environment & Energy Report - Bloomberg BNA, May 31, 2018](#)

Author: Sam Pearson

Industry and health advocacy organizations are watching closely as the EPA adds new tools so that, during emergencies, local authorities and first responders can access chemical trade secrets previously kept in-house.

Their concerns are twofold, however. It could take too long for company data to reach authorities that need it during a factory accident or fire, and the files might not be kept secure when they arrive. ...

The agency is acting after Congress amended the nation's chemical oversight law, the Toxic Substances Control Act, in 2016. The changes came after reports that the identities of more than 17,000 chemicals were withheld as confidential business information, preventing regulators from sharing data with firefighters and emergency medical technicians facing spills and accidents.

The information could help communities better understand how to fight chemical fires, or in what manner a little-known substance spilled in a river is likely to harm the public.

[Read more...](#)

---

*Greenlist Bulletin is compiled by:  
Mary Butow  
Research and Reference Specialist  
Toxics Use Reduction Institute  
University of Massachusetts Lowell  
126 John Street, Suite 14, Second Floor  
Lowell, MA 01852  
978-934-4365  
978-934-3050 (fax)  
mary@turi.org*