

TRICLOSAN FACT SHEET

What is triclosan?

Triclosan is an antibacterial chemical that is used in a variety of products to stop the growth of bacteria, fungus, and mildew and to deodorize.

What products contain triclosan?

Triclosan is in about 76% of liquid and 29% of bar soaps, and is also contained in personal care products such as toothpaste, cosmetics, facewash, and deodorant and household products such as countertops, textiles, and kitchenware. Popular items that contain triclosan include: Dial liquid hand soap, antibacterial Softsoap, Clearasil Face Wash, Colgate Total toothpaste, Reach Antibacterial Toothbrush, Colgate Breeze Mouthwash, Right Guard and Old Spice Deodorant, Faberware Microban knives and cutting boards, Merrell Shoes, and Biofresh socks.

Who regulates the use of triclosan?

The Environmental Protection Agency (EPA), the Food and Drug Administration (FDA) and the Consumer Product Safety Commission (CPSC). Please see the next page for more detail.

Why is triclosan a public health concern?

In addition to the exposure obtained by direct ingestion (i.e. toothpaste) or absorption through the skin (i.e. soaps, lotions), the chemical also ends up in our lakes, rivers and drinking water sources because many of the products that contain triclosan end up being washed down the drain. A U.S. Geological Survey performed in 1999-2000 found triclosan in 60% of U.S. streams. Health effects include:

- 1) **Endocrine Disruption:** Triclosan is believed to be an endocrine disruptor that may interfere with thyroid hormone function, which is vital for proper development of the brain and nervous system in infants and children, and regulates energy balance in adults.
- 2) **Antibacterial Resistance:** According to the American Medical Association, frequent use of antimicrobial chemicals such as triclosan can predispose bacteria to resistance against therapeutic antibiotics. This can lead to infections that are not treatable using today's medications. The American Medical Association has concluded that "there is little evidence to support the use of antimicrobials in consumer products such as topical hand lotions and soaps" and that "use of antimicrobials for which acquired resistance has been demonstrated in bacteria as ingredients in consumer products should be discontinued."
- 3) **Environmental Toxicity:** Triclosan has been shown to be toxic to fish and other aquatic animals and aquatic plants.




What do the experts say about the effectiveness of triclosan?

Guidance provided by an FDA advisory panel in 2005 stated that antibacterial soaps and washes are no more effective at preventing illness than plain soap and water.¹

What do other countries do?

Europe recently banned triclosan in all items expected to come into contact with food, and has set limits on how much triclosan can be in cosmetics. Some countries have also issued consumer advisories or regulations. For more, see page 3.

¹ <http://www.webmd.com/news/20051020/fda-panel-no-advantage-to-antibacterial-soap>

PRODUCTS CONTAINING TRICLOSAN	WHO'S RESPONSIBLE?	HOW DO THEY REGULATE TRICLOSAN?
	<p>FDA - Federal Food Drug and Cosmetic Act</p> <ul style="list-style-type: none"> • Can regulate soaps, personal care products, drugs and cosmetics that contain triclosan. 	<ul style="list-style-type: none"> • Rules for soaps containing anti-microbials not yet published • In 1997, FDA granted Colgate a new drug approval for triclosan-containing toothpaste • For cosmetics, FDA requires labeling of all chemicals and can ban or restrict any chemical via rulemaking
	<p>EPA - Federal Insecticide, Fungicide, and Rodenticide Act *</p> <ul style="list-style-type: none"> • Approved triclosan for use in more than 100 types of consumer products. <p>FDA – Federal Food Drug and Cosmetic Act</p> <ul style="list-style-type: none"> • Can regulate triclosan used in food contact products (i.e.. cutting boards) when triclosan is used to protect the product from degradation. <p>CPSC - Federal Hazardous Substance Act</p> <ul style="list-style-type: none"> • Can regulate triclosan-containing consumer products, other than those products regulated by FDA. 	<ul style="list-style-type: none"> • EPA's next planned triclosan review: 2013 • EPA can regulate triclosan when used in food contact products (i.e. cutting boards) when triclosan is used for purposes of killing microbes. • CPSC can require labeling or ban the use of triclosan in particular products or classes of products if they meet the definition of "hazardous substance". CPSC can recall a particular product that is in violation of a regulation.
	<p>EPA – Safe Drinking Water Act</p> <ul style="list-style-type: none"> • Can set limits, restrictions and monitoring requirements for contaminants in drinking water. 	<ul style="list-style-type: none"> • EPA does not consider antibiotic resistance when setting limits of exposure through drinking water, and has not called for regulation or monitoring of triclosan in drinking water

* Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), EPA can regulate pesticide chemicals such as triclosan by restricting its uses. For example, in 2008 EPA announced that it would no longer permit triclosan to be included in paints and stains and all paint and stain manufacturers removed triclosan from their products. In 1997, EPA prevented the manufacturer of Playskool toys from selling items that made claims that the triclosan used as a material preservative protected children from microbial infections. These claims lacked EPA approval and went beyond the registered use of triclosan in these products, and therefore were subject to enforcement action by EPA. However, if the same manufacturer made the same toys but did not advertise the toys as being anti-bacterial, manufacturers wouldn't even have to disclose the triclosan the toys contain. Thus, the most effective way for EPA to rapidly regulate exposure to triclosan would be to prohibit its use in all plastics or in specific types of products, such as those intended for use by vulnerable populations (i.e. children) and in all plastics intended to come into contact with food.

Other Countries Have Acted to Restrict Triclosan Exposure

European Union

On March 19, 2010, the European Union (EU) acted ¹ to prohibit (starting in 2011) the use of triclosan in products intended to come into contact with food, saying that Ciba/BASF, triclosan's manufacturer, believed that "it does not consider the use of the substance in plastics intended to come into contact with food appropriate any more." This follows the EU's 2009 regulations to impose limits on the amount of triclosan contained in cosmetics.²

Canada

In September 2009, Canada's Health Ministry acted to restrict human exposure to triclosan by requiring labeling provisions on some consumer products.³ For example, for oral cosmetics, such as lipsticks, packaging labels must be included that states that "the product is not to be used by children under the age of 12."

Norway

In October 2008, Norway's Pollution Control Authority recommended⁴ restrictions on "ten substances which are particularly harmful to health and environment," including triclosan. It recommended that the ban include production, imports, exports and trade of products that contain triclosan, when the amount in the product exceeds or is equal to limits. The supporting documents⁵ state that "triclosan has no necessary function in most products. Regulation will reduce occurrences in the environment, as well as reduce the risk of damage to health. On the overall, it is our assessment that the measure will not entail significant economic costs. On the basis of the documentation we have, we expect that the benefit will be greater than the costs."

Germany

On June 26, 2006, Germany's Federal Institute for Risk Assessment, which reports to the Federal Ministry of Food, Agriculture and Consumer Protection, said that it believed triclosan should not be included in consumer products and should be used only in hospitals and other medical establishments. It further advised consumers "to refrain from using biocide-containing cleaning agents and products in the home."⁶ On June 12, 2009, this body reiterated its view, stating it believes that "the use of triclosan should be reduced to the absolutely necessary minimum."⁷

Denmark, Norway, Sweden and Finland

In 2000, Denmark, Norway and Sweden issued consumer advisories related to triclosan, followed by Finland in 2001.⁸ Denmark found that use of triclosan fell by 54% between 2000-2004, following its warning.⁹ The five Swedish government agencies advised that consumer products containing anti-bacterial agents do not work better than products that do not contain them, and that these products can lead to adverse environmental and health effects.¹⁰ Consumers were therefore advised not to use such products unless special medical reasons exist.

Japan

In 2000, Japan's Ministry of Health and Welfare issued regulations¹¹ surrounding the use of chemicals in cosmetics, and specifically restricted the amount of triclosan that was permitted in such products.

1 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:075:0025:0026:EN:PDF>

2 Regulation (EC) No 1223/2009 of the European Parliament and of the Council November, 30 2009

3 http://www.hc-sc.gc.ca/cps-spc/person/cosmet/info-ind-prof/_hot-list-critique/hotlist-liste_3-eng.php

4 http://www.klif.no/artikkel____42883.aspx

5 http://www.klif.no/nyheter/dokumenter/forbrukerprodukter_forslag_MD080708_4_english.pdf

6 <http://www.bfr.bund.de/cd/7975>

7 http://www.bfr.bund.de/cm/230/bfr_supports_ban_on_triclosan_in_food_contact_materials.pdf

8 ENDS Europe, October, 26 2000, Denmark discourages household antibacterials and ENDS Europe, February 16, 2001, Finnish warning on anti-bacterial chemicals

9 http://www.mst.dk/Virksomhed_og_myndighed/Bekaempelsesmidler/Biocider/Forborgere/Desinfektionsmidler+%e2%80%93+triclosan/Fakta+om+triclosan/

10 http://www.kemi.se/upload/Trycksaker/Pdf/Antibakrapport_2001.pdf

11 <http://www.mhlw.go.jp/english/topics/cosmetics/index.html>