

Are there laws that protect us?

In the EU some EDCs, such as BPA, are regulated by the EU chemicals regulation REACH. According to the European Cosmetics Directive, most of the ingredients in products must be declared. In the directives for toys and food packaging, regulation of EDCs has so far fallen short. This could change with the new regulation. Officially recognised endocrine-disrupting pesticides and biocides are banned under EU law, but exceptions exist. From 2027, warning labels will be required on packaging in the event of endocrine-disrupting effects for humans or the environment. In 2023 the German federal government published a plan for protection against endocrine disruptors, implementation should follow. Please note: regulations may differ between countries when it comes to EDCs.

How can this guide help?

As laws do not really protect us from harmful substances, we provide information about chemicals of concern, such as EDCs in products and give tips on how you can avoid them.



Your right to information

When purchasing a product, ask the retailer if it contains any endocrine disruptors. For some substances there is an obligation to provide information within 45 days. This obligation to provide information only applies to some substances (Candidate List of substances of very high concern (ECHA)). However, you can raise awareness and influence product policy by asking critical questions.

WECF is committed to pollutant free products in politics and in production. Support us with a donation.
WECF e.V., IBAN DE68 7015 0000 0013 1390 50

Would you like to know more?

www.projectnesting.org
https://www.wen.org.uk/our-work/green-baby/

Get in touch with us

Women Engage for a Common Future,
WECF e.V., St.-Jakobs-Pl. 10, D-80331 Munich
wecf@wecf.org/de, info@nestbau.org

www.wecf.org

General Tips

- Less is more! Think carefully about what you need.
- Avoid products made of PVC (recycling code 3) and polycarbonate (recycling code 7); glass, stainless steel and pottery are better than plastic for storing food.



- Ventilate regularly. Pollutants collect in the indoor air.
- Find out more with the WECF guides and on www.nestbau.info on topics such as Toys, personal hygiene, cleaning products, DIY and renovation.
- For fewer harmful substances, look out for the following labels:



Food and food packaging

Textiles, clothing and shoes

Body and baby care products

Baby and children's products, toys

Tip

If possible, compare the information on the product with the EDCs listed in the table.

Further links

www.projectnesting.org
https://www.wen.org.uk/our-work/greenbaby/
www.oekotest.de (German)
www.ecolabel.com/en/
www.test.de (German)

Apps

ToxFox, CodeCheck, Yuka

Funded by



Responsibility for content at WECF e.V.. Edited by Wen.UK

EDCs and their field of application

BHA (food additive E320) and BHT (butylhydroxytoluene, E321), antioxidants in cosmetics, medicines, food, etc.

Bisphenols: (A, F, S etc.) additives in the production of plastics (PVC etc.) and other applications (thermal paper etc.)

Alkylphenols such as nonylphenols, octylphenols and their ethoxylates. Detergents, emulsifiers in cleaning agents and in the textile industry

Organotin compounds such as tributyltin (TBT), preservatives and stabilisers, e.g. in PVC products, imprints on textiles, disinfectants, water toys, sporting goods, food packaging

Parabens Butyl-, propylparaben, preservatives in cosmetics or food additives E214, E215, E218, E219

Perfluorinated: (PFOA, PFDS, PFDA, PFNA, PFHxS etc.) Intermediate components of surfactants or surface protection agents

Phthalates (DEHP, DBP, BBP, DINP, DIDP, DNOP etc.) and DINCH: plasticisers in plastics (PVC etc.) and other applications (e.g. cosmetics)

Resorcinol: substance in hair dyes

Siloxane: (Cyclopentasiloxane (D4), Cyclomethicone (D5), Cyclotetrasiloxane (D6)) Emollients in cosmetics

UV filters: benzophenone-3, 3-benzylidenecamphor, 4-methylbenzylidenecamphor, 4,4-dihydroxybenzophenone, benzophenone, ethylhexyl methoxycinnamate

Possible harmful effects

Suspected endocrine disruptors BHA: Possibly carcinogenic

BPA: Reproductive toxicant classified as SVHC in the EU. Other bisphenols: Suspected EDC*

Harmful to the environment, toxic, endocrine disruptor, reproductive system disruptor

Harmful to the environment, carcinogenic, immunotoxin, endocrine disruptor, sensitising, can cause allergies, toxic to reproduction, neurotoxic.

Presumed endocrine disruptor (EDC)

*Some are classified as PBT**, probably toxic to the liver, toxic to reproduction and carcinogenic*

*DEHP: Reprotoxic
Other phthalates: suspected EDC*

EDC with effects on the thyroid gland

*PBT**, suspected EDC D6: toxic for reproduction*

*Suspected endocrine disruptor (EDC).
Some are toxic to aquatic organisms*

Regulations

Currently assessed by the EU

Banned in the EU in baby bottles, plastic and food packaging for children under 3 years and in thermal paper

Subject to authorisation under the REACH Regulation; prohibited in textiles imported into the EU that are intended for laundering (except for used or recycled articles made from textiles without ethoxylated nonylphenols)

Prohibited for use in anti-fouling paint, regulated in food packaging with limit values, regulated in children's toys by the Toy Safety Directive

Prohibited in unrinsed cosmetics intended for children under 3 years of age

PFOA: production ban and restriction in articles and mixtures

Several phthalates, classified as SVHC by the EU, some are banned in toys and childcare articles, others in certain applications*

Maximum permitted concentration in hair dyes

D4, D5: Restrictions in rinsed-off cosmetics. Restriction of the 3 substances for all cosmetics currently under review

Several are subject to a maximum authorised concentration in cosmetics

Labelling

Labelled

BPA: PC or number 7 in a triangle. Bisphenols often not labelled. Avoid hard plastic

No labelling, contact the manufacturer

No labelling obligation Manufacturer's obligation to provide information

Labelled in cosmetics (parabens) and food/tobacco products (E214 etc.)

Not labelled

*No labelling
Avoid PVC or number 3 in a triangle, avoid soft plastics*

Labelled

Labelled in cosmetics

Labelled in cosmetics. Sometimes contained in textiles where they are not labelled

Protect health –
avoid toxic chemicals

WECF Guide
Updated edition



Women Engage
for a Common Future

*SVHC: Substance of very high concern for health or the environment according to the European REACH regulation.
**PBT: persistent, bioaccumulative and toxic

Endocrine Disruptive Chemicals
(EDCs) in everyday products

Food and food packaging



Substances of concern in food are usually pesticide residues in fruit and vegetables. BPA and other bisphenols also find their way into food from plastic packaging. Although there are considerable concerns, BPA is still used in many plastic products. To protect babies, baby bottles made of polycarbonate containing BPA are banned. Other EDCs that can be found in food are preservatives (propylparaben E216 and butylhydroxyanisole E320), antioxidants and phthalates (plasticisers) in plastic packaging.

■ Tips

- **Avoid products made of polycarbonate** (PC or recycling code 07); if plastic, then polyethylene PE is better.
- **Use food packaging made of harmless alternatives** such as glass, ceramic or stainless steel.
- **Fresh, preferably unpackaged, regional food is best.** Organic products are free from pesticide residues.
- **Do not heat food in plastic containers, not even in the microwave.**
- **Avoid take-away made from disposable packaging material;** the packaging often contains fat-repellent per- and polyfluoroalkyl substances (PFAS). Bring plastic-free containers.

Textiles, clothing and shoes

Many imported textiles can be contaminated with nonylphenol ethoxylates. This detergent substance banned in Europe is used to clean textiles in the Asian countries of manufacture. Plastic prints on clothing can contain PVC or phthalates, which can also be found in rubber boots, wellies, kids' waterproof trousers and plastic clogs. Outdoor clothing often contains water-repellent chemicals like (PFAS). Textiles with antibacterial properties such as sportswear can contain tributyltin (TBT), triclosan or nanosilver/silver particles.

Be careful with imported articles, which sometimes contain hormonally active or irritating biocides which are banned in the EU but permitted in other countries.

All these harmful substances released during washing contaminate the water. Also be careful with imported leather shoes: These can be preserved with PCP (pentachlorophenol) or may contain or contain allergy-causing chromates.



■ Tips

- **New textiles should generally be washed** before wearing them for the first time.
- **Avoid clothing that contains PVC parts** (e.g. plastic logos, pictures on kids' clothes, football jerseys). Rubber boots, plastic clogs and bathing sandals are also available in PVC-free materials such as ethyl vinyl acetate (EVA).
- **Good alternatives** are textiles made from natural textiles. Also, look out for the Oeko-Tex Standard 100 label.
- **Avoid products** with antibacterial properties, such as antibacterial socks.

Body and baby care products

Some ingredients in cosmetics can effect hormones. These include UV filters in sun protection products, day creams, and preservatives such as parabens in shower gels, shampoos, creams, lotions, and baby care products. Since 2015, the preservatives propyl and butyl paraben may no longer be contained in children's cosmetics that are used in the diaper area. In cosmetics for children and adults, the limit value for both substances was reduced from 0.4% and 0.8%, respectively, to a standardised 0.14%.



■ Tips

- **Pay attention to the ingredient information on cosmetic products.** Leave care products preserved with propylparaben, butylparaben or BHA on the shelf.
- **Choose certified organic and natural cosmetic products** i.e. by Cosmos or Natrue
- **Avoid sun protection products and day care creams with the hormonally active UV filters:** 3-benzylidene camphor, 4-methyl benzylidene camphor, 4,4-dihydroxy benzophenone, benzophenone, Ethylhexyl methoxycinnamate. Mineral sunscreen without nanoparticles is better.
- **Use the WECF guides on baby, child, and body care.**



Baby and children's products

Infants explore their environment with all their senses. Harmful substances can enter the body through breathing, the mouth and the particularly permeable skin of babies. To protect against EDCs, products for babies and children should always be PVC-, phthalate- and BPA-free. In Germany, BPA is banned in baby bottles and some plasticisers in products for children under the age of three. However, products for children over the age of 3 may contain all of these harmful substances.

■ Tips

- **Look out for BPA-free and phthalate-free products for children.** Ask in the shops!
- **Avoid plastic changing mats?** There are alternatives i.e. made from rubber.



Toys

EDCs are still not regulated as a separate category in toys. This could change with the new EU Toy Safety Directive. Toys made of soft plastic can contain phthalates, which have hormonal effects and are harmful to reproduction; cuddly toys made of plush can contain harmful brominated flame retardants. Unfortunately, there is still no obligation to declare the ingredients in toys. For Bisphenol A (BPA), there is only a migration limit for all toys, which states how much BPA from the product may enter the body, for example.

■ Tips

- **Choose rag dolls or cuddly toys** made from natural textiles and look out for the Oeko-Tex seal 100.
- **Wash all cuddly toys!**
- **Do not give your baby any soft plastic toys that are not approved for children under 3 years of age.**
- **Smell the toys before you buy them!** Use your nose to make a healthier choice.



Protect health – avoid toxic chemicals

What is the problem?

Our hormone system is crucial for developing processes in our body. There are chemicals that can disrupt this system. These so-called endocrine disruptors, EDCs for short, enter the body from the environment via the respiratory tract, skin and food and can act like the body's own hormones or block them. In this way, they send the wrong signals and influence hormonally controlled processes, which can have serious health consequences. Fertility problems, an increased risk of developing breast, prostate and testicular cancer, diabetes and malformations of the reproductive organs are just some of the health effects associated with EDCs.

EDCs are also referred to as „endocrine disruptors“ and „environmental toxins“. These substances currently include more than 1,000 substances such as bisphenols, parabens, plasticisers (phthalates) and PFAS. They are found in many everyday products, often without our knowledge. Many pesticides are

also endocrine disruptors. EDCs can be long-lasting (persistent), accumulate in the body and have an effect even at low concentrations. In our opinion, there is no such thing as a safe dose, especially as we are exposed to many substances at the same time („cocktail effect“).

Why are women and children particularly at risk?

Women have more fatty tissue and accumulate fat-soluble substances such as phthalates more easily. Their oestrogenic effect can, for example, promote the growth of breast cancer cells. The effect of EDCs depends very much on the time of absorption in the body. Particularly critical phases are pregnancy (foetal development), infancy, early childhood, puberty and menopause. During pregnancy and breastfeeding, harmful substances reach the child directly. Studies confirm adverse health effects, even later in life. Therefore, it is important to ensure the protection of these groups.