

Do You Know what REACH is?

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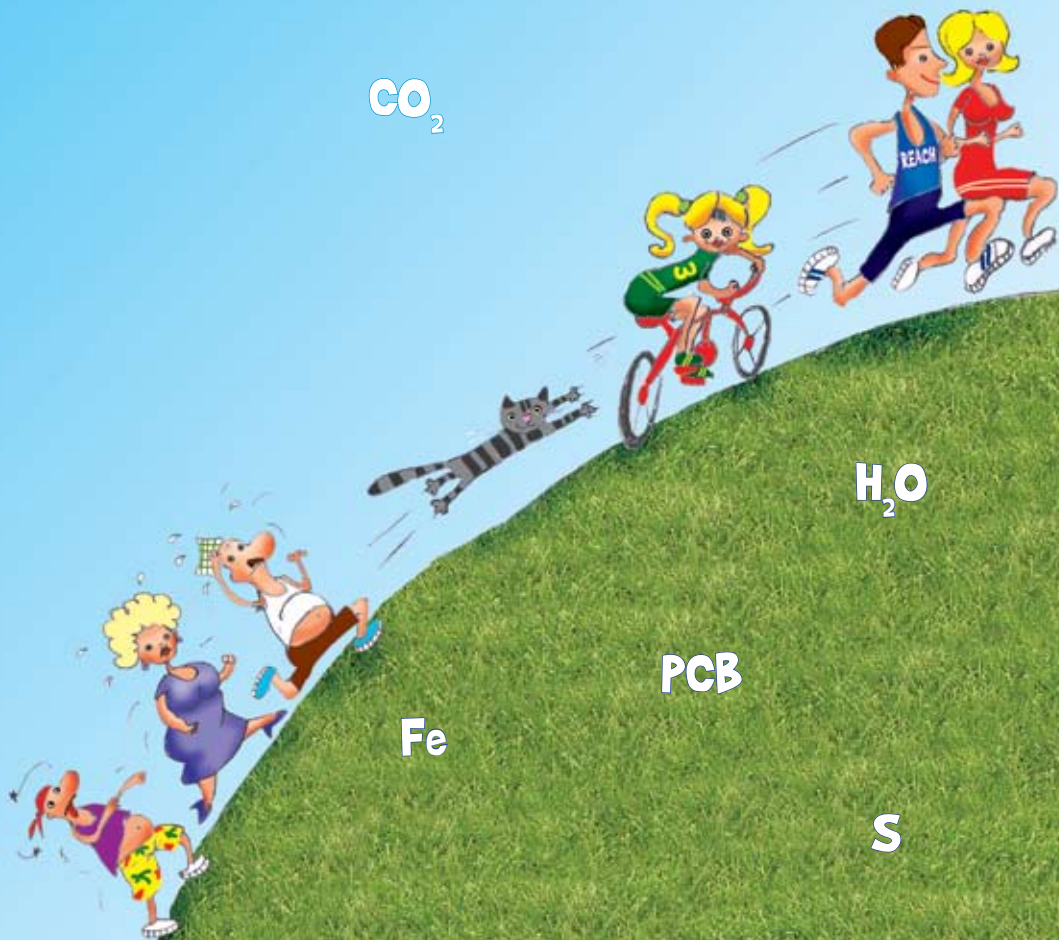
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Chemicals are an important part of our everyday lives. They make our life more comfortable and we can't imagine some aspects of our lives without them. Everywhere - at home, workplace, schools, on the streets - we are in continuous contact with mixtures of various chemicals either directly or via products and articles around us and we are not even conscious about it!

WHAT ARE CHEMICALS?

Chemicals can be chemical substances, which are manufactured or naturally occurring chemical elements and chemical compounds. For example chemical substance is silver in ring or red pigment in hair colour. A mixture of two or more substances is called preparation.

WHERE WE CAN FIND CHEMICALS AROUND US?

- in chemicals laboratory? Yes, but not only...
- in our bathroom
- in our bedroom
- in our TV and computer
- in our shoes and clothes

WHY CHEMICALS CAN BE DANGEROUS?

Chemicals can be dangerous, because of their inherent properties – they can be toxic, they may cause developmental or reproductive disturbances, mutations in genetics or bioaccumulate in our fat, cause cancer, cause allergy etc.

DANGEROUS NOWADAY...



Phtalates are manufactured substances that are commonly added to plastics to make them flexible. They are often present in plastic kettles, shower curtains, rainwear, baby pants, dolls, some toys, shoes, T-shirts, automobile upholstery and tops, furniture upholstery, etc.

Not surprising, you haven't heard about phtalates, as there is usually no information about this substance on the labels of widely used products where phtalates occur.

These substances are banned in child-care products, toys, and cosmetics.

Exposure to phtalates may lead to the delay of sexual maturity (they are hormone disrupters), liver, kidney and testicular damage. It is also found in breast milk and maybe transferred to baby.

WHO CAN BE HARMED?

- Humans - especially vulnerable groups are children, pregnant women.
- Environment – rivers, air, seas, soil, animals, plants, etc.



WHAT CAN BE THE EFFECTS?

- Short term effects – corrosion, allergy on skin, eye irritation, water pollution, dead fish etc.
- Long term effects – cancer, disturbances in endocrine system, developmental and reproductive disturbances, mutations in genetics, irreversible negative effects to next generations, bioaccumulation, occurrence of substances far away from the original source of emission in the environment.



WHERE IS THE PROBLEM?

- There are chemicals, about which people do have some information, however it is not easy to set the safety requirements and to protect people and environment.
- There are a lot of chemicals, about which there is suspicion that those might have negative effects on human health and the environment, however there is not enough information about their properties.
- Even more, there is not enough information about a number of substances, which are around us in everyday life.



LESSONS FROM THE PAST...

Did You know that PCBs have been used since 1929 and were banned to sell in Europe in 1970? Do you know why?

Polychlorinated byphenyls (PCBs) are a subset of the synthetic organic chemicals; about 130 of these are likely to occur in commercial products; commercial PCBs are a mixture of 50 or more PCBs congeners.

PCBs have been widely used as additives to oils in electrical equipment, hydraulic machinery, plasticizers in paints, and other applications where chemical stability has been required for safety, operation, or durability since 1929.

It is assessed that approximately 1,8 million tons of PCBs were produced worldwide till 1993.

Although the chemical stability of many PCBs has been a benefit from the standpoint of commercial use, it has created an environmental problem because it translates into extreme persistence when the PCBs are eventually released into the environment.

PCBs are among the most widespread environmental pollutants, having been detected in virtually all environmental media (indoor and outdoor air, surface and ground water, soil, and food) in almost every corner of the globe.

PCBs are often not only, but many PCB-mixtures are also toxic;

Exposure to low levels of PCBs is thought to cause various acute (skin rashes, eye irritation, disturbances in liver function and the immune system, irritation of the respiratory tract, headaches, dizziness, memory loss, and nervousness) and chronic (liver damage, reproductive and development effects, and possibly cancer) health effects.

PCBs were finally banned for sale in Europe in the 1970s, but they are so persistent and still present in the environment and human bodies.

Exposure to PCBs still occurs mostly from food containing small amounts of these compounds, particularly meat, fish and poultry.

The results of WWF blood testing in Europe show that every person tested was contaminated with a variety of industrial chemicals, including PCBs and other pollutants banned many years ago as well as chemicals in use today.



HOW IS CHEMICALS CONTROL REGULATED IN EU? WHY IS A NEW CHEMICALS POLICY REACH NEEDED?

The current legislative system for chemicals has been largely unable to identify the risks posed by many chemicals and is slow to act where risks can occur.

WHAT IS REACH?

On 18 December 2006 the European Union adopted a new chemicals regulatory framework for Registration, Evaluation and Authorisation of CHEMicals (REACH). REACH aims to improve the protection of human health and the environment while maintaining the competitiveness and enhancing the innovative capability of the EU chemicals industry.

It puts the onus on companies to show that the produced chemicals are safe. It is also meant to encourage the replacement of hazardous chemicals with safer ones and to spur the chemicals sector into researching and developing more new and safer chemicals and products.

One of the priorities of REACH is to gain more information about chemicals, to make it available to the public and to increase its reliability. Currently very little information is known about the chemicals around us. REACH forces producers and importers to collect the available data and if there is lack of data then to generate new data and to prove that the chemicals they manufacture or import are safe. The relevant information about chemicals properties also needs to be available to the public.

WHAT DOES REACH AIM TO DO?

The legislation addresses several specific issues:

SAFETY

Now: Industry is using thousands of chemicals that have not been tested for their effects on human health and the environment, yet these chemicals can be found in various products ranging from shampoos to cars. It is left to public health authorities to test those that they assume may be hazardous - but only 140 chemicals have been selected for risk assessment since 1993 according to EU legislation, and even fewer have completed the process.

Reach says: Any chemical produced or imported in significant quantities has to be tested unless sufficient safety information already exists. The cost should be born by the producer or the importer.

REPLACEMENT OF HAZARDOUS CHEMICALS

Now: While some hazardous chemicals, for example azocolourants in textile and leather, are banned or restricted to on use the EU market, others are still widely used, despite some indications that they may cause cancer, or damage the body's hormone system.

Reach says: Business will be able to use "substances of very high concern" only if they have gained a relevant permission (authorisation according to REACH-regulation) from European Chemicals Agency. Authorisation will be granted under specific conditions, and will have to be regularly renewed, encouraging companies to seek safer alternatives.

ENCOURAGEMENT OF INNOVATION

Now: Existing rules oblige companies to test "new" chemicals (3000 chemicals in the market nowadays) - but the 100 000 "existing" chemicals that were on the market before 1981 are exempt. So, for companies it is easier and cheaper to stick with the "existing" untested chemicals than to develop new ones.

Reach says: Most of the "existing" chemicals would have to be tested too, so innovation would become more worthwhile for companies and there would be more diverse safer chemicals and products for consumer

WHAT ARE "SUBSTANCES OF VERY HIGH CONCERN"?

Cause cancer, or mutation or interfere with the body's reproductive function (carcinogenic, mutagenic or toxic to reproduction - CMRs)

Take a long time to break down, accumulate in the body and are toxic (persistent, bio-accumulative and toxic - PBTs)

Take a very long time to break down and accumulate in the body (very persistent, very bio-accumulative - vPvBs)

Have serious and irreversible effects on humans and the environment, for example substances that disturb the body's hormone system



REACH basic elements are:

- Registration - manufacturers and importers of chemicals will obtain relevant information on their substances and apply for registration.
- Evaluation – European Chemicals Agency (ECHA) will evaluate registration dossier information submitted by manufacturers and importers. Member State competent authorities will perform substance evaluation if there is a concern over potential risks of substance to human health or the environment.
- Authorisation - the use of substances with properties of very high concern will be made subject to authorisation; manufacturers and importers of such substances will need to apply for a special permission (authorisation) and demonstrate that risks associated with uses of these substances are adequately controlled or that the socio-economic benefits of their use outweigh the risks and there are no suitable alternative substitute substances or technologies.
- Restrictions - a procedure to regulate that the manufacture, placing on the market or use of certain dangerous substances shall be either subject to restrictions or prohibited.
- To reduce testing on vertebrate animals, data sharing about such studies is compulsory.
- Better information on chemicals hazards and risks and how to manage them will be passed down and up the supply chain.
- Access to information rule combines a system of publicly available information over the Internet.

REACH IN NUMBERS

Around 1 000 pages of text

Around 30 000 chemicals to be registered over 11 years

Around 500 new carcinogenic, mutagenic and repro-toxic substances are expected to be detected in the nearest future

Billions of euros saved in healthcare costs

WHAT ARE REACH BENEFITS?

KNOW MORE - good knowledge about chemical substances (risks) before placing them on the market;

KNOW, WHAT YOU USE - increased knowledge on chemicals used in the everyday products;

SAFER PRODUCTS - restriction/substitution of carcinogenic, mutagenic, repro-toxic chemicals or other dangerous chemicals with irreversible effects on human health or the environment to make the products safer;

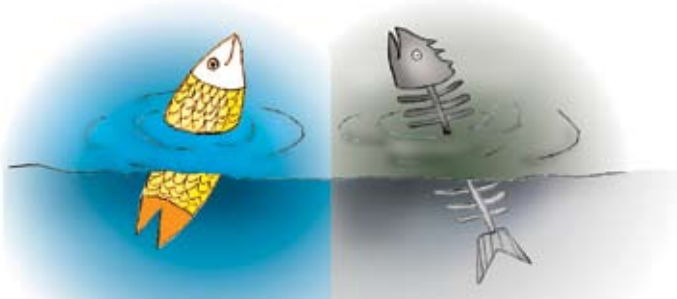
SAFER PRODUCTS – stimulation of research and innovation of safer chemicals, technologies and products creates conditions for marketing of safer products;

YOUR AND YOUR CHILDREN'S HEALTH IS BETTER - better public health due to safer chemicals and their uses;



YOUR LIVING ENVIRONMENT IS BETTER - less environmental pollution and promotion of non-animal testing;

SAVE MONEY - Less costs for polluted drinking water treatment, soil remediation (for more see Table with 'Reach in numbers').



WHAT KIND OF INFORMATION WILL BE MADE PUBLICLY AVAILABLE?

EU-citizens should have access to information about chemicals to which they may be exposed, in order to allow them to make informed decisions about their use of chemicals. Therefore European Chemicals Agency will form a database and hold information to achieve free and easy access to data. Information will be made public for consumers, non-governmental organisations, researchers and other interested parties through the Internet free of charge on specific information about chemicals (safety and environmental aspects):

- Chemical substances list with
 - classification and labelling information
 - physicochemical properties
 - environmental fate
 - toxicological and ecotoxicological properties
 - guidance of safe use
- Safety data sheets provided by manufacturers (containing information about hazards of the substance/ preparation, recommended risk management measures to control risks to human health and the environment).
- Chemicals restricted to be used on the European market.

This information will be available for substances manufactured or imported in volumes at or above 1 tonne per year.

Some of the detailed information will be available only to interested parties like manufacturers, users, importers, etc., and rest of the information will be confidential according to industry's legitimate right to protect confidential business information.



WHERE TO FIND INFORMATION ABOUT REACH?

REACH regulation and development process:

European Commission DG Environment

http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm

European Commission DG Enterprise

http://ec.europa.eu/enterprise/reach/index_en.htm

European Chemicals Bureau

<http://ecb.jrc.it/REACH/>

European Chemicals Agency

<http://www.hel2.fi/eca/eca.html>

INFORMATION ABOUT REACH CAN BE ALSO FOUND ON WEBSITES OF OTHER ORGANISATIONS DEALING WITH THE TOPIC:

European Chemical Industry Council:

<http://www.cefic.be/>

European Centre for Ecotoxicology and Toxicology of Chemicals:

<http://www.ecetoc.org/>

European Environmental Bureau:

<http://www.eeb.org/>

Greenpeace:

www.greenpeace.org

WWF: Global environmental conservation organization:

www.panda.org

International Chemicals Secretariat:

<http://www.chemsec.org/>

The European Consumers' Organisation:

www.beuc.org

European Trade Union Confederation:

www.etuc.org

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