HAZARDOUS SUBSTANCES MANAGEMENT

NO BIG DEAL

HAZARDOUS SUBSTANCES MANAGEMENT. NO BIG DEAL

INTRODUCTION

The LIFE Fit for REACH project aimed at reducing emissions through the substitution of hazardous chemicals and resource efficiency. We helped more than 80 companies in the Baltic States to find a better way of managing hazardous substances in their everyday work. We provided them with necessary guidance and helped to find safer alternatives or technological solutions.

During the project, we elaborated various informational material about chemicals management. Most of it is devoted to solve complicated technical issues or answer specific questions at the engineering level.

This comic booklet called "Hazardous substances management. No big deal", has a slightly different approach: with these funny, but accurate drawings, we want to motivate companies to start changing towards better safeguarding the health of workers and clients, as well as a cleaner environment. The booklet showcases various ways to use less or no hazardous substances at all. In some cases it can be achieved just with minimal effort and at little cost. Managing hazardous substances can be "no big deal" if you know all the necessary steps. We want to tell you that it is not as difficult as you think.

The LIFE Fit for REACH addressed mainly SMEs of the manufacturing sector, but this publication aims to reach all kinds and sizes of businesses - from one-man companies to a multi-thousand corporation, from a service provider to a manufacturer of goods.

Our team hopes that our experience expressed in the form of these nice comic strips will become an inspiration for you to make the first steps towards change in your company.

Heidrun Fammler Project Manager Baltic Environmental Forum

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Chemical inventories help companies to keep an overview on what they use, for which products, and at which workplaces. They should include information on the composition of mixtures so the occurrence of substances of (very high) concern can be tracked.



Chemical inventories support the internal materials management, communication with suppliers and customers, as well as the implementation of legislation for the protection of workers and the environment. In some countries, it is legally required to have a chemicals inventory in place.

IDENTIFYING CANDIDATES

It would be great

to know if we use any

chemicals of concern.

But where

do I start??

ABEDEER

FOR SUBSTITUTION

6 0

Each substance is assigned a unique CAS number. Several organisations publish lists of substances which they have (scientifically) assessed to be a substitution priority. To identify priorities, you may simply compare the CAS-numbers on these lists to those occurring in your inventory.

of %

10-20

3-5

0,1-0,3

5-7

...

CAS-NO EC NO

5555-00-77 411-222-3

4321-65-87 987-9874

0000-11-22 963-852-74

1234-56-78 987-000-987

...

Substance

Substance 1

Substance 2

Substance 3

Substance 7

...

Product name

Mixture 1

Look - it is so easy! Now when you have your inventory sorted out, you need just a CAS number to identify and prioritise the chemicals.

Check the databases:

• The REACH candidate list for authorisation contains all substances which are prioritised by the national authorities for substitution at EU-level, as they are very hazardous (SVHC).

• The SinList contains substances which the organisation ChemSec assessed as fulfilling the same criteria that underlie the REACH candidate list, but which have not been officially prioritised for substitution (but may be in the future).

echa.europa.eu

Lead sulfochromate yellow

2 0

EC List 245-693-7 CAS NO.4344-37-2

Properties concern

You see -

easy as pie. Good job!

BECHA

There are several lists where you can find this information. E.g. ECHA's database. You just type

your CAS number here -

and voila:





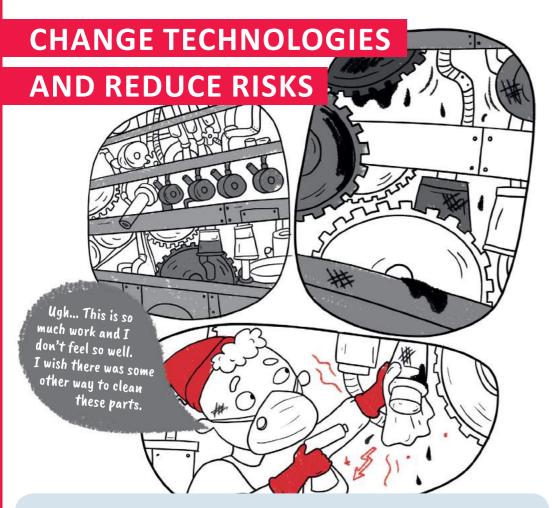
Look to your supplier as a partner in product innovation. He may also be happy to get feedback on his products from you and learn about the demand for new/alternative products. Only when you communicate your needs can others react to them.



Take a good look and assess the properties of the alternatives and related risks before starting to use them. Only if the alternative has less hazardous properties, the substitution will not be regrettable. Note that often less information is available for alternatives and that you may not know all the properties to make a decision!



There are several approaches to assess the safety of alternatives. One of these is **SubSelect** - SME-friendly free tool helping to roughly compare alternatives. It may be good to seek expert advice if you are unsure about the hazards and risks from alternatives.

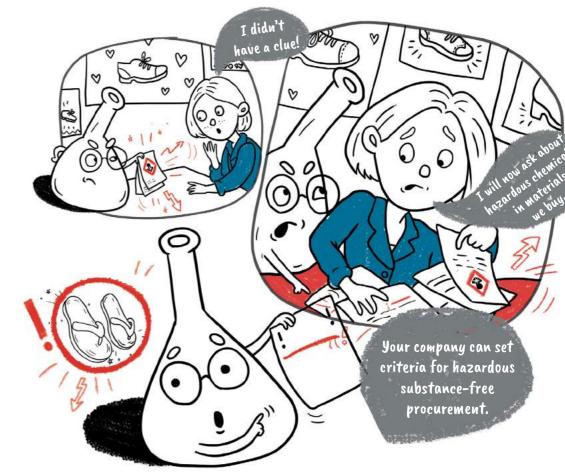


Sometimes reducing the use of hazardous substances can be done by shifting to other technologies that provide the same function. There is a fear of large investments, but all options should be thoroughly checked before deciding.



Modern technologies are not always super-expensive. Often, not only the use of hazardous substances can be avoided or reduced by a new technology but also efficiency and effective-ness of the process can be increased.





Ask your supplier if raw materials or products you use contain **Substances of Very High Concern** (SVHC). If they do, try to find other alternatives to prevent these chemicals entering the market. It will earn the trust of your customers.



If the use of hazardous chemicals cannot be avoided and it is not possible to avoid exposure to them by technical means, such as local exhaust ventilation, personal protective equipment (PPE) should be worn to protect your health. Check the pyramid of hierarchy of hazard controls:

Or should I be worried about these headaches I've been

having daily?...

than some Many a effects of manifest long o For example, c occurs more t

Better safe

Many adverse effects of chemicals manifest long after exposure. For example, cancer usually occurs more than 10 years after an exposure to carcinogenic chemicals.

ELIMINATION

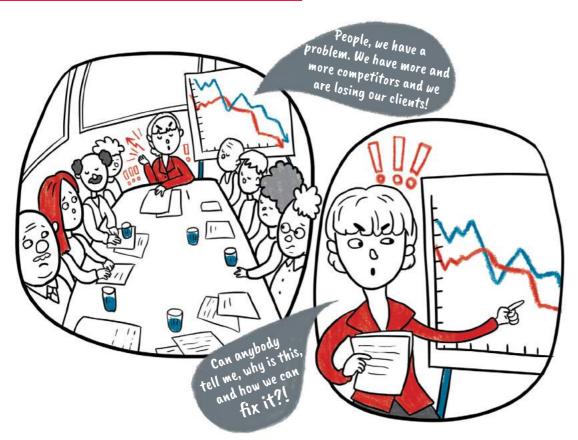
SUBSTITUTION

ENGENEERING

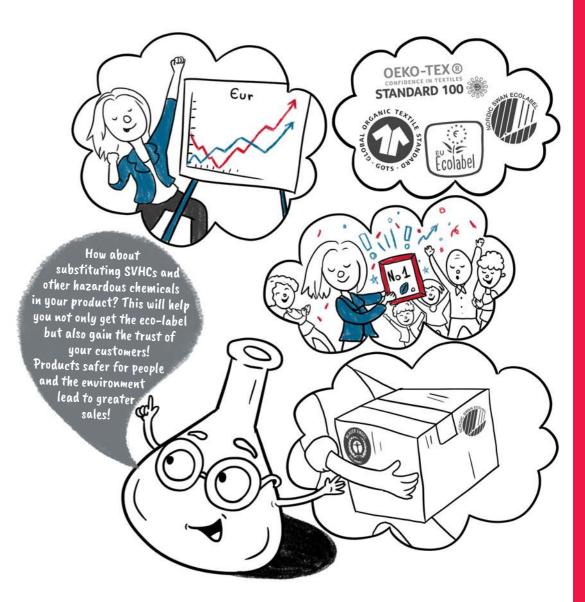
CONTROLS ADMINISTRATIV CONTROLS PPE

0

MARKET BENEFITS



Substituting unwanted substances and making products safer for people and the environment can have market benefits. It may bring new clients and earn respect from society.



USEFUL LINKS

fitreach.eu

Project LIFE Fit For REACH: substitution examples, information in various chemicals risk management topics, tools and publications

fitreach.eu/content/tools

- Example template for keeping the chemicals inventory
- Checklist for safety data sheets (SDS)
- SubSelect tool to asses and compare substances and mixtures

echa.europa.eu/candidate-list-table

The list of Substances of Very High Concern

sinlist.chemsec.org

Substitute It Now list (SinList)

subsportplus.eu

Substitution support portal, including case database

marketplace.chemsec.org

Database of safer alternatives of hazardous chemicals

LIFE/FIT FOF REACH



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