

Chemicals in Products – Information Requirements

Hazardous chemicals in products -
The need for enhanced EU regulations
29 October 2013

- Benefits and challenges of publicly available information on chemicals in products
- Status and gaps regarding information duties in chemical legislation (CLP and REACH)
- Supporting tools and interim solutions
- Conclusions

- Benefits and challenges of publicly available information on chemicals in products

Publicly available information on chemicals:

Information which is communicated directly with the product or has to be delivered on request to everybody.

Use for the consumer:

- Raise awareness
- Possibility to avoid certain chemicals (informed consumer)
- Facilitate safe use and disposal

Example:

Detergents have full declaration of ingredients and need to be labelled according to CLP-regulation.



Fotos: UBA

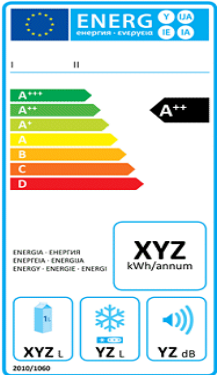


Benefits of information on chemicals for professionals

E.g. benefits for technical development and substitution

- **Manufacturers** need to consider which substances are contained in their products (supply chain)
- **Knowledge multipliers** like stakeholder organisations, administration or science have a basis to give guidance on (non)recommendable products and substitutes, on use or on disposal

Example: Labelling of the cooling agents in fridges



CBPesf4033 Index 20B / 001		Service-Nr./No. Service: 9989452-02	
<small>KÜHL-GEFRIER-KOMBINATION-BIO-FRESH-SUPER-A-EDELSTAHL COMBINE-FREEZER-FRESH-ICE-STEEL DOORS COMBINE-REFRIGERATEUR-CONGELATEUR-BIOFRESH-PORTES EN ACIER INOX КОМБИНАЦИЯ ФРИДЖОКОНГЕЛАТОР-БИОФРЕШ-ДУВЕРТА АЦЕРО ИНОХ</small>			
Klasse/Class	Ap-Typ/AP-Type	Bruttinhalt/Gross Capacity	Gefriervermögen/Freezing Capacity
Class/Class	AP-Type/AP-Type	Volume Brnt/Capacited Bruta	Plowvor on Congel./Capac Congelators
SN-T	5 6313 4	319 l	14kg/24h
Nachhall	Gas /K /G /KE /BIO	R 600a: 60g	
Net Capacity	Tot /R /F /CE /BIO	1,4 A AC 220-240 V 50 Hz	
Volume Util	Tot /R /C /CA /BIO	Serial-Nr. 99.999.999.9	
Capac. Util	Tot /F /C /BO /BIO	Insulation (Pentan) Schutzklasse / Класс защиты: I	
292 l /205 l/87 l /87 l	Made in Germany / Сделано в Германии		
20B			

Cooling Agent: R600a
 = Isobutane
 = no fluorohydrocarbon
 which is hazardous to the climate



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- **Which information** should be given to whom in which detail and which design?
Target group specific editing is useful, conclusions should be possible.
- **Where** should information duties on chemicals in products be implemented?
 - Information duties reasonable for all product groups could be implemented in chemical legislation (e.g. information on SVHC)
 - Information duties reasonable for specific product groups could be implemented in product legislation (e.g. emissions data for indoor construction products).

- Status and gaps in chemical legislation regarding information duties on chemicals in products
 - CLP regulation, EC/1272/2008
 - REACH regulation, EC/1907/2006
 - (Biocidal products regulation, EU/528/2012)

Term “product” not used in chemical legislation, but distinction between “substances”, “mixtures” and “articles” (REACH Art. 3)

Substance: chemical element and its compounds in the natural state or obtained by any manufacturing process [...]

Mixture: mixture or solution composed of two or more substances [...]
e.g. plastic granules, shoe polish, paint



Foto: shutterstock.com

Article: object which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition

e.g. floor covering, television, jumper, toaster



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CLP regulation: classification and labelling - status

- CLP regulation defines for substances and mixtures the classification into hazard classes and hazard categories. Hazard classes concern
 - Health hazards
 - Environmental hazards
 - Physical hazards
- CLP regulation defines for substances and mixtures the labelling with
 - pictograms, signal words, hazard statements and precautionary statements



CLP regulation: classification and labelling – gaps

- No hazard class „hazardous for the climate“
- No hazard classes which reflect the definitions of REACH for PBT- and vPvB-substances
- No hazard classes for endocrine disrupting chemicals
- Cosmetics are exempted from CLP
- ...

REACH regulation: Information on mixtures – status and gaps

- Safety data sheet for professional users with information on all hazardous substances in the mixture above certain concentrations (Art. 31)
- Gap: for consumers no safety data sheet, no information on ingredients

(but substances which are carcinogenic, mutagenic or toxic for reproduction are generally excluded from mixtures for consumers according to REACH Annex XVII, No 28-30)

In contrast to mixtures for articles no safety data sheet needs to be provided, but only information on substances of very high concern.

Substances of **V**ery **H**igh **C**oncern: SVHC

- carcinogenic, mutagenic or toxic for reproduction (CMR) or
- persistent + bioaccumulative + toxic (PBT) or
- very persistent + very bioaccumulative (vPvB) or
- equivalent level of concern (e.g. endocrine disruptors)

Inclusion in REACH candidate list (updated every 6 months)

- Any supplier of an article containing an SVHC > 0,1% shall provide the professional recipient with available information to allow safe use of the article, as a minimum the name of the SVHC
→ information should be available in the whole supply chain up to the retailer
- On request consumer should get this information within 45 d free of charge.

REACH regulation: Information on articles – gaps suppliers

- Dissent on basis for 0.1 % limit
- No format stipulated for communication
- Substance name not sufficient, additional information needed:
 - SVHC properties, classification and labelling
 - Concentration/amount of SVHC in the article, e.g. if articles are assembled
 - Function of the SVHC
 - Instructions for safe use and safe reuse/disposal
- How to get information on imported articles?

REACH regulation: Information on articles – gaps consumers

- Often difficult to place the request
- Incompetent response: „Ask the manufacturer“, „We comply with all relevant legal provisions“
- No response after 45 d
- Sometimes absence of SVHC stated while chemical analysis shows the opposite

REACH regulation: Information on articles – conclusions gaps

Conclusion: duty to communicate information is often ineffective

Reasons:

- Regulation itself is not precise enough
- Regulation is not correctly put into practice:
 - Knowledge on REACH not sufficient, no systematic approach in companies
 - Responsibilities in the companies unclear
 - Communication in the supply chain ineffective
 - Sometimes huge range of products
 - Insufficient information on imported articles

- Supporting tools and interim solutions

REACH regulation: Information on articles – information leaflet

- Information leaflet for retailers:
Informs retailers on their duties under
REACH

<http://www.umweltbundesamt.de/en/publikationen/chemikalien-in-produkten-wichtige-informationen>



- SVHC Communicator

<http://svhc-in-articles-communication.de/index.php?id=web-tool> (Test version)

SVHC-Communication

INFORMATION ON THE SVHC IN THE ARTICLE

Calculate the concentration of SVHC

DF 06 Weight of the article [kg]

Enter the weight of the article that you supply.
Note: according to the "once an article - always an article" approach, you may not sum up the weight of two or more articles you merge during your production.

If you produce the article/article part, you can simply weigh the article.
If you process the input article(s)/article part(s) and include substances, mixtures or raw materials into or onto it, add the weight of the input article and the chemicals / raw materials you add.
If you merge articles/article parts without adding substances, mixtures or materials, the article weight remains that of the obtained article (parts).

DF 07 Amount of SVHC in the article [g]

Enter the total amount of the SVHC in the article.
Note: according to the "once an article - always an article" approach, you may not sum up the SVHC amounts of two or more articles you merge during your production.

If you produce the article/article part, you know the included SVHC amount from the safety data sheet / supplier.
If you process the input article(s)/article part(s) and include the SVHC as such or in mixtures, add the amount in the input article and the amounts you include.
If you don't use the SVHC in your production, enter the SVHC amount communicated by your supplier.

REACH regulation: Online tool for consumer requests

Simplified request via
internet:

<http://www.reach-info.de/verbraucheranfrage.htm>

- Entry of barcode number + contact data
- Automatic generation and forwarding of a request to the manufacturer, importer or trademark owner via e-mail

SEND A CONSUMER ENQUIRY

Barcode-number *

Product Name *

Your contact information, so that the company can respond

First name *

Last name *

Email *

Address *

Zip * / City *

Country

REACH regulation: Planned app for consumer requests

- Planned smartphone app with same functionality as online tool + barcode scanning
- Potentially coupled with database on SVHC in articles
- Will be easily adaptable for other EU Member States



Source: freepik.com

Construction products regulation: Reference to REACH duties on articles

- **Example:** Construction Products Regulation (CPR, EU/305/2011)

Art. 6 (5): information on mixtures (according Art. 31 REACH) or on articles (according Art. 33 REACH) shall be provided together with the declaration of performance (i.e. together with CE marking)



<u>Declaration of performance for a Window (EN 14351-1:2006)</u>	
9. Declared Performance	
Essential Characteristic	Performance
9. 1 Thermal transmittance	1,5 W/m ² *k
9. 2 Dangerous substances a)	none
....	

a) Under the framework of the chemical regulation REACH the candidate list on „SVHC substances“ was published by the European Chemical Agency ECHA (19.12.2012). This product doesn't contain any substances of this SVHC list.

Construction products regulation: Communication format for SVHC

- In case a construction product (article) contains an SVHC: Suggestion for a communication format is given at the UBA-Website: <http://www.umweltbundesamt.de/en/format-for-mandatory-designation-of-construction>



Foto: c.juergen_faehle/Fotolia.com

Template for Article 6(5)

	Data to be filled in by the manufacturer
Substance name ^I	Hexabromocyclododecane (HBCDD) (here exemplary ^{II})
EC Number	247-148-4 and 221-695-9
CAS Number	25637-99-4, 3194-55-6
SVHC property or properties	PBT (article 57d of Regulation (EC) 1907/2006)
Classification in accordance with Regulation (EC) No 1272/2008	Repr. 2 (H361); Lact. (H362); Aquatic Acute 1 (H400); Aquatic Chronic 1 (H410)
Concentration ^{III} in product or its part ^{IV}	0,7% w/w (here exemplary) in the whole product
Amount in product ^V	210 g/m ³ (here exemplary)
Function of the substance	(here exemplary)
Instructions for safe use (the data filled in below is intended as exemplary)	

- In other product regulations leading to CE marking the duty of information on SVHC/ dangerous substances could be implemented in the same way, e.g. RoHS regulation for electronics,

Conclusions: Potential amendments in chemical and product regulations

REACH:

- mixtures: (simplified) SDS for consumers
- articles: obligatory labelling of SVHC / hazardous substances in consumer articles, communication format for supply chain (SVHC, hazardous substances)

CLP:

- could be extended to cosmetics
- hazard classes for substances damaging climate or having PBT, vPvB properties, etc.

Product regulations:

- Communication of SVHC information with CE-mark
- Addition of relevant information specific for a product group

Thank you for your attention!



eva.becker@uba.de
johanna.wurbs@uba.de
www.umweltbundeamt.de