

The mapping assignment 2017 - 2020

Mapping of hazardous substances in mixtures and articles that
are not already restricted within the EU

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What is the purpose?

Four "key sentences" in the assignment text from the Government

"The Chemicals Inspectorate shall carry out a survey of the presence of hazardous substances in mixtures and articles that are not yet restricted within the EU.

The survey will primarily focus on particularly hazardous substances (SVHC-properties), but it may also cover hazardous substances where relevant to the protection of human health and the environment. Children and young people are a priority and an equality perspective shall be adopted. In particular, the presence of these substances in articles and mixtures available to consumers shall be surveyed"

- Partial report = **September 15th 2018**
- Final report = **December 1st 2020**
- Budget = **20 millions SEK**

Central issues

	Issue
➡	Where are the particularly dangerous substances / dangerous substances in society?
➡	Can there be a potential risk for consumer / child exposure?
➡	What substances and applications need to be addressed? What is already covered by EU legislation?

General mapping

a) **The "substance track"**

Starting point: Substances with hazardous properties such as CMR-properties allergenic properties, endocrine disruption properties and PBT/vPvB properties.

b) **The "material track"**

Starting point: Expert knowledge on different materials and the content of different "functional chemicals" in the material.

c) **The "industry branch track"**

Starting point: Compiled information from Product register at the Swedish Chemicals Agency about the use of different hazardous substances in different industry branches according to Statistics Sweden (SCB)

Specific mapping

Specific mapping of hazardous chemicals in different product groups of particular interest. Will be conducted in cooperation with the Supervision Department at KemI.

Completed surveys so far (2017)

General mapping

- Rubber and silicones (elastomers)
- Paper och paperboard

Specific mapping

- Microplastics (Included in separate government assignment)
- Mapping of criterias for hazardous substances in ecolabelling systems
- Feminine hygiene products

Kartläggning av kriterier för farliga ämnen i miljömärkningssystem

En del i regeringsuppdraget om kartläggning av farliga
ämnen 2017–2020

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THE ECOLABELLING PROJECT

Background: The Swedish Government has assigned the Swedish Chemicals Agency to map the presence of *hazardous chemicals* in products and articles that are *not already restricted* within the EU.

The mission: to map the *criteria* for chemical content in products and articles within different *ecolabelling* systems.

Reason: Ecolabelling *put restrictions on more hazardous substances* than those that are regulated by legislation. It has not previously been mapped *which* these substances are and *how* they are restricted within different ecolabelling systems.

Aim: Identifying problematic substances (and material groups) that may occur in consumer-related articles and products. *Chemicals currently not restricted by legislation* are given particular interest

Method: Desktop study of criteria document and relevant background documents

**Product areas
within the
scope:**

Buildings,
Construction
products,
Paints and
furnitures

Cosmetic Products

Textile and leather

Chemicals for
consumers

Electronics

Paper-, office-,
toys- and
packaging articles

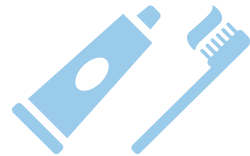
1. Buildings,
Construction products,
Paints and furnitures



2. Chemicals for consumers



3. Cosmetic
products



4. Textile
and
leather



5. Electronics



6. Paper-, Office-, Toys-
and Packaging articles



**Product areas
outside the
scope:**

Food



Articles for
professional use



Less important
product areas



Six annexes with substance information

Ämnesgrupp	Miljömärkningskriterier (kemikaliebegränsningar)	CAS nr	Begränsningsregler (lagstiftning)	Svanen - Golv	Svanen - Byggskivor	EU-blomman - Golv	Möbelfakta - Möbler	Svanen - Möbler	EU-blomman - Möbler	EU-blomman - Madrasser
	o-Anisidine	90-04-0	Bilaga XVII (43) Kandidatlistan							
	2,6-Xylidine	87-62-7	-							
	2,4-Xylidine	95-68-1	-							
Färgämnen / Pigment - Cancerogena				Inga CMR-färgämnen						
	C.I. Acid Red 26	3761-53-3	-							
	C.I. Basic Red 9	569-61-9	-							
	C.I. Basic Violet	632-99-5	-							
	C.I. Direct Black 38	1937-37-7	Bilaga XVII (28) Kandidatlistan							
	C.I. Direct Blue 6	2602-46-2	Bilaga XVII (28)							
	C.I. Direct Red 28	573-58-0	Bilaga XVII (28) Kandidatlistan							
	C.I. Disperse Blue 1 (ej azo)	2475-45-8	Bilaga XVII (28)							
	C.I. Disperse Orange 11	82-28-0	-							
	C.I. Disperse Orange 149	85136-74-9	-							
	C.I. Disperse Yellow 3	2832-40-8	-							
	Cadmium sulphide	1306-23-6	Bilaga XVII (23) Kandidatlistan							
	Lead(II) acetate basic	51404-69-4	Kandidatlistan							
	Lead orange	1314-41-6	Kandidatlistan							
	Potassium dichromate	7778-50-9	Bilaga XIV (19) Kandidatlistan							
	Sodium chromate	7775-11-3	Bilaga XIV (22) Kandidatlistan							

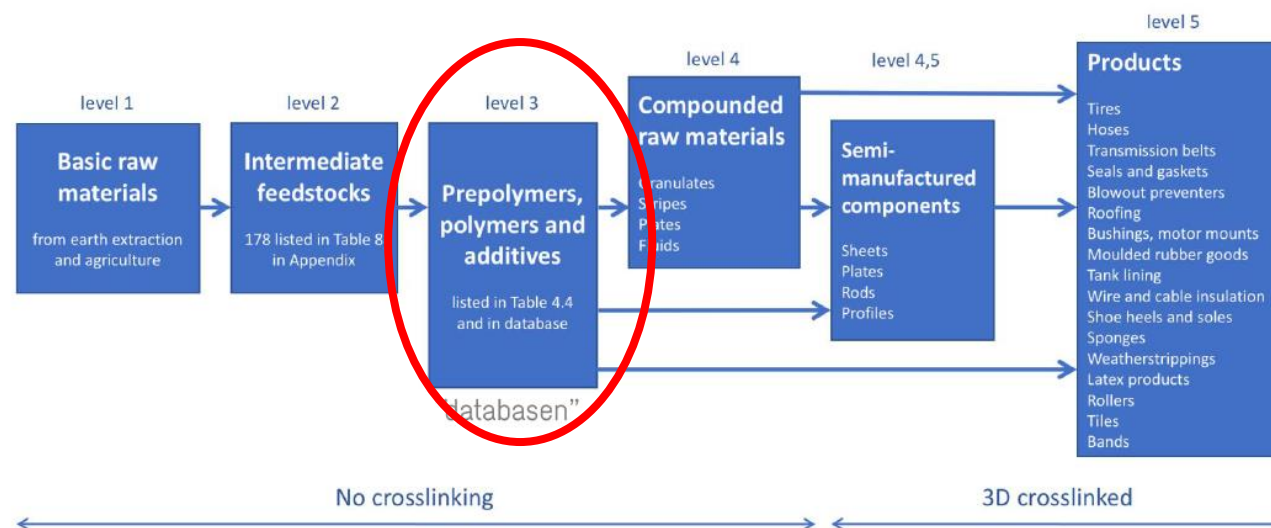
Chemical Substances in Elastomer Materials

A study within the government assignment on mapping hazardous chemical substances 2017–2020

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Some results from the "material track" - Elastomers

1. Description of **4** (main) categories of elastomers, **26** sub-categories with relevance for consumer applications.
2. Material flows from a Swedish and Global perspective
3. Overview of recycling, surface treatment and substitution (dialogue with industry)
4. Mapping of chemical substances in elastomers regarding function and typical concentration ranges (database with about 3000 items).

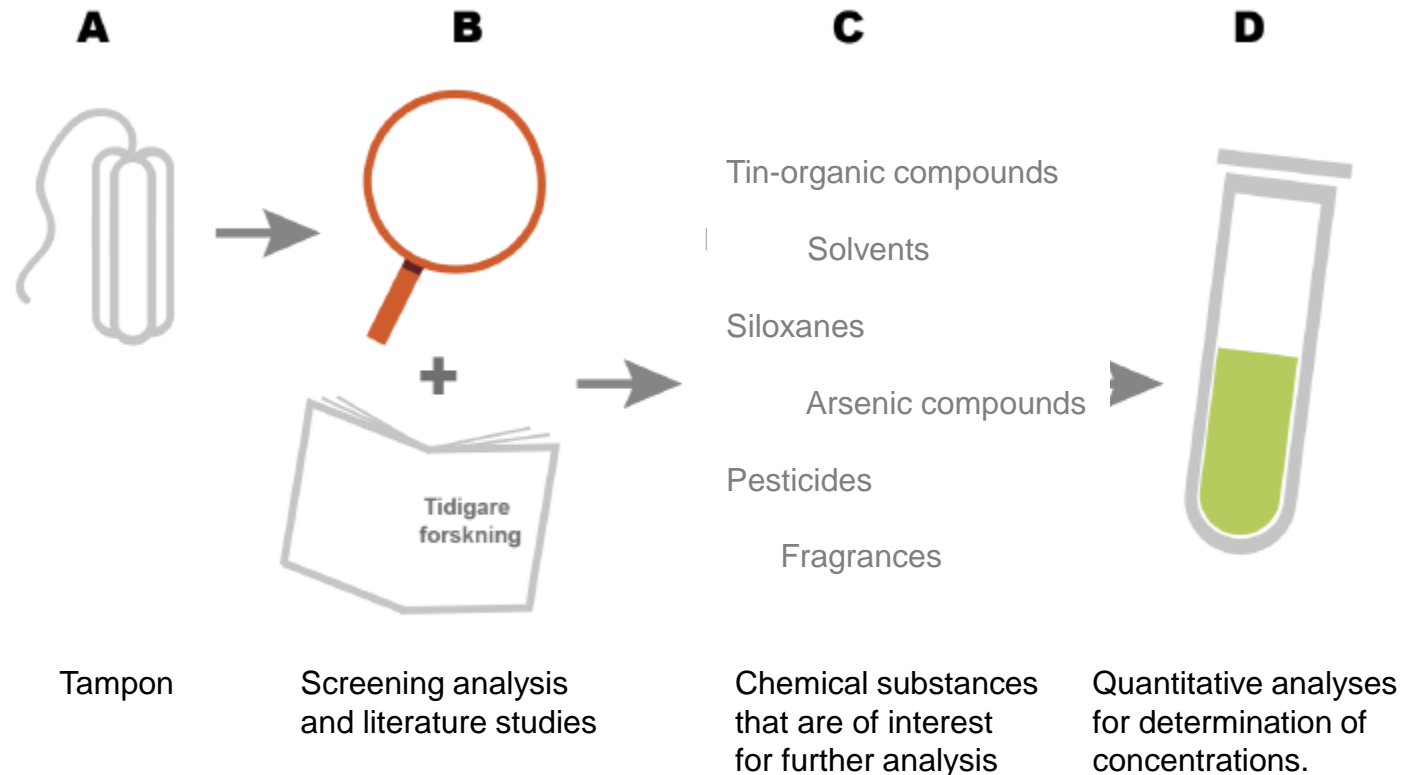


Survey of hazardous chemical substances in feminine hygiene products

A study within the government assignment on mapping hazardous chemical
substances 2017–2020

REPORT

Systematic method for mapping hazardous substances in feminine hygiene products



Risk assessment

Table 7. Health risk assessments were performed for 18 chemical substances found in the feminine hygiene products. The table presents the calculated exposure, the reference value used in the health risk assessment and the risk characterisation ratio (RCR) for each chemical substance for the product types in which the substances were found

Chemical substance	EC no. / CAS no.	Exposure (mg/kg body weight/day) or concentration in the product mg/cm ² (for skin allergens)	Reference value used in the calculations (mg/kg body weight/day or mg/cm ² for skin allergens)	Risk characterisation ratio (exposure/reference value) RCR
1,4-bis(2,3-epoxipropoxy)butane	219-371-7 / 2425-79-8	Sanitary towel: 0.002 Panty liner: 0.00007 Tampon: 0.0003	0.33 mg/kg bw/day	Sanitary towel: 0.006 Panty liner: 0.0002 Tampon: 0.0009
1,4-bis[(vinyl)oxy)methyl]cyclohexane	413-370-7 / 17351-75-6	Tampon: 0.002	2.8 mg/kg bw/day	Tampon: 0.0007
1-Ethyl-2-pyrrolidone	220-250-6 / 2687-91-4	Panty liner: 0.0002	0.5 mg/kg bw/day	Panty liner: 0.0004
2-Ethylhexyl acrylate	203-080-7 / 103-11-7	Sanitary towel: 0.00006 Panty liner: 0.0003	0.242 mg/cm ²	Sanitary towel: 0.0002 Panty liner: 0.001
Abietic acid	208-178-3 / 514-10-3	Sanitary towel: 0.01 Panty liner: 0.0008	0.021 mg/cm ²	Sanitary towel: 0.5 Panty liner: 0.04

The mapping assignment, autumn 2018

