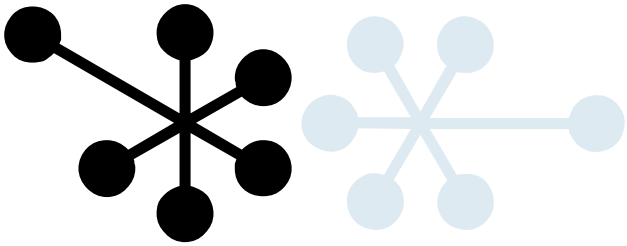
LIFE / FIT FOR REACH



Beginners guide to green procurement for enterprises - a tool for the better management of hazardous substances

Do private enterprises need to care about the internal procurement process?

These guidelines are developed for enterprises willing to be more efficient and improve the management of raw materials and chemicals containing hazardous substances. The guidelines contain an explanatory introduction and an Excel tool (https://goo.gl/Vv7zLa) with checklists and examples for the development or improvement of the internal management system.

With the assistance of this guide you can evaluate your current practice and, if you decide to build your own procurement system or improve the existing one, it contains recommendations and examples of how you can develop it. Companies with an advanced management system have often integrated the requirements for internal procurement in the overall management system.

In order to develop this guide, we used experience from the organisation of the procurement at public authorities as well as existing guides of the other companies.

Why have an internal procurement process?

To produce or provide services, every enterprise:

- Has to purchase raw materials and other resources.
- Wants to be as efficient as possible, receiving the supplies of raw materials and services of the best quality for a fair price.

Since there are no specific rules regulating a company's internal procurement process, would it help to develop or improve one's own procurement system?

If you want to be more efficient: yes! By setting internal procurement rules you can:

1) avoide unnecessary, inappropriate and overpriced supplies,
2) improve the quality of your products and services by having higher quality incoming materials,
3) avoid idle time due to an unexpected short supply of raw materials,
4) avoid a negative legal impact because of unknown and unexpected impurities in the raw materials,
5) find better, more reliable suppliers who offer additional services in finding safer alternatives, advising on more appropriate use, assisting you in the development of new products and services.

Some enterprises have also developed their own procurement guides also for their suppliers, also incorporating specific questions related to hazardous substances.

A sewing machine producer "JANOME" has developed green procurement guidelines for its own company and for suppliers to be followed when implementing companies' environmental policies. Similar guidelines or codes of conduct are developed by many other companies to address the priorities of their corporate policy. World famous furniture retailer "IKEA" has its own purchase strategy to "optimise the value chain".

Resources and references

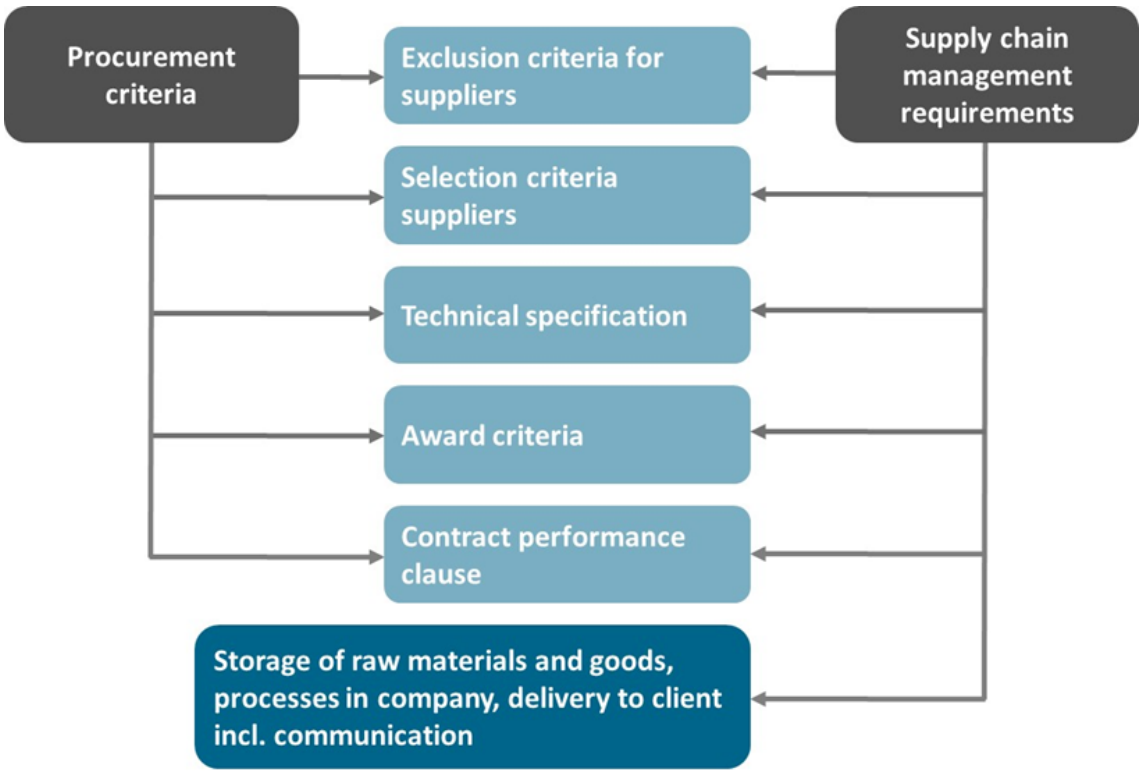
- IKEA Purchasing strategy, https://www.slideshare.net/YongKC1/ikea-purchasing-strategy
- JANOME Group Green Procurement Guidelines, http://www.janome.co.jp/company/pdf/greensupply_e.pdf
- Buying Green! - A Handbook on green public procurement, European Commission, 2016, http://ec.europa.eu/environment/gpp/buying_handbook_en.htm

How does one organise their own procurement system to improve hazardous substance management?

The enterprise can address several issues to improve its procurement system (see picture 1):

1. Develop procurement procedures that define responsibilities regarding who decides on purchases, controls supplies and evaluates results, and how. Procurement procedure can be integrated as a part of your existing management system. With regard to hazardous substances, the evaluation of the raw materials, including assessment of hazardous properties prior to purchase, can help you to avoid unexpected costs or legal implications.

2. Improve your supply chain management: Elaborate criteria for the better selection of suppliers and the raw materials. Ensure that your criteria reflect seeing your supplier as a valuable, knowledgeable partner in developing new products, new business and jointly finding solutions to problems.

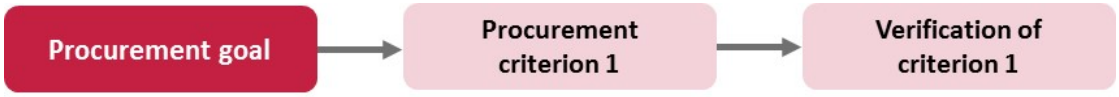


Picture 1. Organisation of procurement criteria in an enterprise

Your procurement criteria depend on your goals e.g.

1) reduce unnecessary hazards,
2) avoid substances that are included in the authorisation list or its candidates,
3) comply with the requirements of Eco-labelling, for example, EU Eco flower or Nordic Swan, or other voluntary standards,
4) have all necessary hazard information in place needed for
    a. compliance with legislation e.g.; REACH, Toys, ROHS etc.,
    b. occupational risk assessment,
    c. consumer information,
    d. waste management,
    e. specific requirements of your clients.

Setting clear goals helps you to define procurement criteria that are specific and verifiable (see picture 2).



Picture 2. Development of procurement criteria in an enterprise

Your criteria can address various steps of procurement:

Exclusion criteria that define with whom you will not co-operate. These criteria will depend on the risk factors you have identified as essential for your enterprise and sector. Businesses are free to choose their partners and even develop "black lists". Public authorities are restricted in defining exclusion criteria, which have to be aligned with legitimate policies and laws, e.g. non-fulfilment of a contract within the last 12 months).

Examples:

- Companies with whom you have terminated the contract due to improper supplies (Verification: records from previous contracts)
- Bad experience with previous supplies (large gaps in hazard information or supplied products did not correspond to legal requirements) (Verification: records from previous contracts)
- Bad references from your reliable partners. (Verification: response from your partners)

Selection criteria will help you to find more suitable and reliable suppliers by defining qualification, experience, turnover etc. Environmental and safety certificate requirements, other industry relevant criteria.

Examples:

- Companies with a certified ISO 140001, 9001, OHAS 18000 system (Verification: copy of certificate issued by the certification body)
- Ready to deliver you all the needed hazard information (safety data sheets, material declarations on the occurrence of certain substances etc.) (Verification: safety data sheet for every chemical or declaration, that the chemical is not classifiable and does not contain hazardous substances that would trigger the issuing of a safety data sheet, and material declaration for each article)

Technical specification characterises your product or service to be procured. Here you develop your minimum criteria e.g. you will not purchase a product or service if it does not comply with minimum criteria.

Examples:

- Safety data sheet is supplied prior to the contract (Verification: safety data sheet for every chemical or declaration, that the chemical is not classifiable and does not contain hazardous substances that would trigger the issuing of a safety data sheet)
- Material declaration about the occurrence of substances included in authorisation list (https://echa.europa.eu/authorisation-list) and candidates for

authorisation (https://echa.europa.eu/candidate-list-table) (Verification: material declaration for each article)
– List of substances to be reported/ or excluded from the product (see Annex IV)

Award criteria are your wish-list defining preferences among the selection and technical criteria, to include quality versus price ratio, functional suitability and other values. The award process should be transparent to enable the evaluation of alternatives.

Examples (focussed on hazardous substances):
– Wood materials with FSC (Forest Stewardship Council) certificate (Verification: copy certificate issued by the certification body)

Contract performance clauses. When the preferred supplier and product is selected, the contract shall include general terms and criteria for the compliance of supply with important criteria, as well as actions needs and fines in the case of incompliance.

Examples (focussed on hazardous substances):
– The supplier is liable for the damage caused to the recipient and downstream recipients due to the improperly communicated hazard information or incompliance with quality requirements /legal requirements (Verification: supply contract)

Table. Example of criteria development

Goal	Criteria		Verification
Compliance with REACH legislation: receiving good quality safety data sheets and information about the content of substances on authorisation	**Exclusion criteria**		
	Selection criteria	Readiness to submit SDS for all hazardous chemicals, chemicals containing hazardous substances and minimum information for non hazardous, and material declarations prior to purchase	Safety data sheet submitted Material declaration about the presence of substances on the authorisation/ candidate list
	Technical specification	Submission of Safety Data Sheet for all chemicals and material declarations for articles prior to purchase	Safety data sheet Material declaration
	Award criteria	Chemicals and articles without substances on the authorisation list/ candidates (70%) Price (30%)	Safety data sheet Material declaration

Goal	Criteria		Verification
lists/ candidates	**Contract performance clause**	In the case of any changes in the hazard information, the supplier automatically submits a renewed version of SDS to the client for any product supplied within 2 years The supplier is liable for the damage caused to the recipient and downstream recipients due to the improperly communicated hazard information or incompliance with quality requirements /legal requirements	Material declaration about presence of substances on authorisation/ candidate list
Compliance with RoHS legislation	**Exclusion criteria**		
	Selection criteria	Readiness to submit material declarations prior to purchase	Material declaration about presence of RoHS substances
	Technical specification	Submission of material declaration prior to purchase Material shall comply with RoHS legislation with regard to foreseen use	Material declaration about presence of RoHS substances
	Award criteria	Chemicals and articles without ROHs substances (30%) Price (70%)	Material declaration about (non) presence of RoHS substances
	Contract performance clause	The supplier is liable for the damage caused to the recipient and downstream recipients due to improperly communicated hazard information or incompliance with quality requirements/legal requirements.	Contract

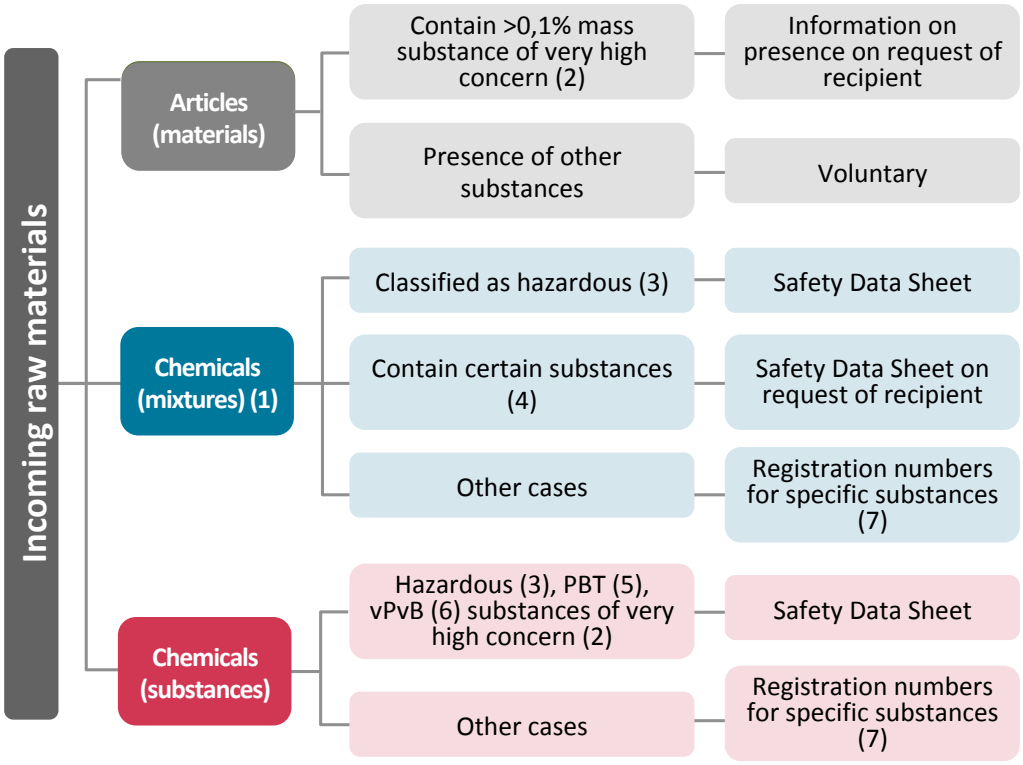
You can check your procurement practice with the help of Excel tool (https://goo.gl/Vv7zLa). This checklist is developed based on guidance for state authorities on public procurement and procurement guidelines of selected companies. By answering to the questions in the Excel checklist about the current system in your company, you may assess the benefits of introducing some of the procedures/ criteria mentioned here in your procurement system (see Template in Annex II).

Which information about raw materials can you receive from your suppliers?

The information about the raw materials, which you can receive from your suppliers, depends on the type of the raw material (article or chemical) and content of

hazardous substances, legal requirements, and your supplier's readiness to deliver information above the legal requirements (see picture 3).

You might also need information above the legal requirements. For example, if you would like to apply for an ecolabel for your products, you might need additional information; your clients might also demand more specific information. In such cases this is a decision of your supplier to deliver the additional information or not. Your explanation to your supplier as to why you need such additional information can increase their motivation for a more positive reply that meets your needs.



Picture 3. Information requirements for supplies of chemicals and materials according to REACH (REACH regulation, Article 31, 32, 33).

(1) Not applicable for polymers, the same requirements as for materials.

(2) SVHC – Substances of Very High Concern, where a substance is included in the list for authorisation[1] or candidate list[2] established in accordance with REACH, Article 59.

(3) Classified as hazardous according to Regulation EC 1272/2008.

(4) Safety data sheet has to be submitted on request, if the chemical mixture contains

- ≥ 1 % by weight for non-gaseous mixtures and ≥ 0,2 % by volume for gaseous mixtures with at least one substance posing human health or environmental hazards; or
- ≥ 0,1 % by weight for non-gaseous mixtures with at least one substance that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitiser category 1, respiratory sensitiser category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic

[1] https://echa.europa.eu/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list

[2] https://echa.europa.eu/candidate-list-table

(PBT, criteria REACH Annex XIII) or very persistent and very bio-accumulative (vPvB, criteria REACH ANNEX XIII) or substances of very high concern, where a substance is included in the list for authorisation or candidate list established in accordance with REACH, Article 59, or

- a substance for which there are Community workplace exposure limits.

(5) persistent, bio-accumulative and toxic substance or very persistent and very bio-accumulative in accordance with the criteria set out in REACH Annex XIII.
(6) very persistent and very bio-accumulative substance in accordance with the criteria set out in REACH Annex XIII.
(7) Substances, for which the authorisation of restriction applies, or any other substance, any other available and relevant information about the substance that is necessary to enable appropriate risk management measures.

REACH gives a consumer of your product the right to ask whether your product contains a substance that is on the authorisation list or a candidate for authorisation (REACH, Article 33). In order to be able to quickly answer requests of the consumers, it is recommend that you require such information from your suppliers in advance.

Hazard information (information on the content of hazardous substances and recommendations for proper management) is a precondition for the safe management of chemicals and articles containing hazardous substances, and therefore constitutes an integral part of the supplied product. Defining and including information requirements and standards within your procurement guidelines and supply contracts will improve the quality of information. The supplier's readiness to submit good quality information, and also information above the legal requirements can also be selective/award criteria to improve supplier choice.

Resources and references

- REACH guidelines, https://echa.europa.eu/guidance-documents/guidance-on-reach
- Buying Green! - A Handbook on green public procurement, European Commission, 2016, http://ec.europa.eu/environment/gpp/buying_handbook_en.htm

How can you evaluate the quality of the information received?

REACH regulation only specifies information to be included in the safety data sheets (REACH, Article 31), but there are no exact rules with regard to other information supplied, e.g., it depends on your request and the supplier's readiness to respond, as well as the supplier's own system.

The quality of safety data sheets lies with the producer of the chemical, the enforcement authorities only organise time-to-time quality control. However, information in the safety data sheets is often not accurate enough: as inspectors report, one third or one half of the safety data sheets contain incompliances,

especially with regard to toxicological and ecological information. This might lead to improper risk management in your company.
Better quality of Safety Data Sheets (SDS) will mean a better service for you. In order to evaluate the quality of SDS you can check for

1) Date of issue – the older the SDS, the higher the probability that it is out-dated. With the adoption of REACH, new information about chemicals is accumulating every day. There are no rules for how old the SDS shall be. However, a producer shall supply an up-to-date SDS to all companies who have received supplies 12 months ago or less (REACH, Article 31, 32, 33), in the case that new information is available.
2) Completeness – SDS shall contain 16 chapters and include all relevant information.
3) Consistency – information on hazardous properties, workers' health, first aid measures etc. shall be consistent. Waste management etc. must correspond to the classification of the chemical.
4) Consistency with hazard information in the Chemical information system at the European Chemicals Agency; however, such checking requires more time.

With the Excel tool (https://goo.gl/Vv7zLa) you can perform a quality check of your safety data sheets, and based on the results ask your supplier to explain and remove the inconsistencies identified.

With regard to other types of information there are no exact rules. Many companies develop their own templates to make it easier for the supplier to submit the information needed.

Resources and references:

- Problems with Safety Data Sheets, © 2017 Wolters Kluwer and/or its affiliate: https://app.croneri.co.uk/feature-articles/problems-safety-data-sheets
- SDS Checklist, 2016 – CEFIC, http://www.cefic.org/Documents/IndustrySupport/REACH-Implementation/Guidance-and-Tools/Cefic-SDS-Checklist-January2016.xlsx

Annex I. Terms and abbreviations

Article - an object which is given a special shape, surface or design during production, which determines its function to a greater degree than its chemical composition" (Article 3, REACH).

Authorisation list – substances meeting the criteria of substances of very high concern, have been assessed (Article 59, REACH), and an authorisation shall be acquired for their further use. https://echa.europa.eu/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list .

Candidate for authorisation - substances meeting the criteria of substances of very high concern, and selected for further assessment (Article 59, REACH)' https://echa.europa.eu/candidate-list-table .

Chemical preparation means a mixture or solution composed of two or more substances (Article 3, REACH).

Hazardous substance – a substance with hazardous properties.

Procurement - process of purchasing of goods, services or works from an external source, including finding the best choices, comparing competing offers, agreeing on terms, receiving agreed goods and services, quality control and further actions. The aim of this process is to get better quality for a fair price.

REACH Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

SDS – safety data sheet – a standardised information sheet about the chemical (substances or preparation), describing its identity, ingredients, and properties and advising on safe management.

Substances of very high concern – substances meeting the criteria for classification as carcinogenic, mutagenic or toxic for reproduction, substances which are persistent, bio-accumulative and toxic (PBT) or very persistent and very bio-accumulative (vPvB) or substances on a case-by-case basis, that cause an equivalent level of concern as CMR or PBT/vPvB substances (Article 57, REACH).

Supply chain management refers to the management of the flow of goods and services, starting from the acquisition and storage of the raw materials, as well as delivering the produced goods to the clients.

Annex II. Template for own procurement policy (hazardous substances specific)

Issue		Example
Goals		Compliance with REACH. Avoidance of substances of very high concern if possible .
Procurement procedure (who and how)		• The exclusion /selection criteria are developed by the supply manager and accepted with department directors. • The technical specification is developed by the department director, products are selected jointly by the supply manager and department director. • Hazard information from a potential supplier is required prior to the purchase contract. • HSE manager evaluates hazard information prior to the purchase and informs the department director in the case of problems.
Procurement criteria	Exclusion criteria	Bad experience with previous supplies (large gaps in hazard information or supplied products did not correspond to legal requirements).
	Selection criteria	Supplier has certified ISO 9000 MS.
	Technical specification	SDS and product declarations on (no) occurrence of substances on the authorisation list and candidates for authorisation shall be submitted prior to the supplier being contracted.
	Award criteria	Training on the safe use of chemical (30%) . Price (70%).
	Contract performance clause	In the case of any changes in the hazard information, the supplier automatically submits an up-to-date version of SDS to the client for any product supplied within 2 years.
Quality control procedure (who and how)		• Department leaders are responsible for the quality check of the supply; in the case of problems the supply manager is informed. • Supply manager evaluates suppliers twice a year based on current practice, complaints

Annex III. Example letter to a supplier of articles

Dear supplier,

We are writing to you in order to gather information on certain substances present in articles (*list of articles*) that you supply to us. This will allow you and us to comply with our legal obligations with regard to Article 33 of the European Regulation No.1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (further on REACH).

The Article 33 (1) of the REACH obliges "a supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0,1 % weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance. The relevant information shall be provided, free of charge, within 45 days of receipt of the request. The list of such substances can be found here (so called authorisation list) and here (so called candidate list). "

Therefore we would like to ask you kindly to inform us if the articles/materials that you supply to us, contain substances above 0,1 % any substance belonging to these lists, by filling out the following questionnaire about each article and sending this to us no later than within 45 days.

Article	Weight of the article	Substance according to REACH Article 57 and 59 contained			Safety advices or other remarks	Mark X, if the article does not contain substances questioned hereto
		Name	CAS No.	Concentration (% w/w)		

Since we are article suppliers, we may consolidate the information received in order to further communicate in the supply chain according to Article 33 of REACH. We commit to guarantee the confidentiality of sources when gathering and consolidating data.

The authorisation list and candidate list will be regularly updated, therefore we kindly ask you to inform us in the case that these changes are relevant for your product e.g. in the case that some of the ingredients contained in the product are listed in the authorisation/candidate list of restriction list.

Looking forward to hearing from you

You can download other letters to suppliers here:

- Letter to supplier about submission of SDS for all chemicals (https://goo.gl/Q5FYDM).
- Letter to supplier about submission of material declaration regarding substances for authorisation and candidates for authorisation (Letter to supplier (https://goo.gl/4tj2vv).
- Letter to supplier about submission of material declaration regarding specific needs (https://goo.gl/9pN2W4).
- Letter to supplier about submission of material declaration regarding specific legislation (https://goo.gl/KVqqz4).

Annex IV. Examples of lists of substances restricted/ banned/ to be reported upon their occurance in products/ services

Name	Reference	Substances, explanation see next page, Annex V	Industry branches
Restricted substances on REACH	REACH regulation, Registration, Evaluation, Authorisation and Restriction of Chemicals, 1907/2006	Various substances, Annex XVII of REACH, https://echa.europa.eu/substances-restricted-under-reach	All, legislation
Substances included in authorisation list and candidates for authorisation list, REACH		Substances meeting the following criteria: • Substances meeting the criteria for classification as carcinogenic, mutagenic or toxic for reproduction (CMR) category 1A or 1B (CLP regulation). • Substances persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) according to REACH Annex XIII. • Substances on a case-by-case basis, that cause an equivalent level of concern as CMR or PBT/vPvB substances. https://echa.europa.eu/addressing-chemicals-of-concern/authorisation/recommendation-for-inclusion-in-the-authorisation-list/authorisation-list https://echa.europa.eu/candidate-list-table	All, legislation
Restricted substances in electrical and electronic devices	RoHS 2 directive 2011/65/EU	Restricts the presence of the following: substances lead, mercury, cadmium, and hexavalent chromium and flame retardants such as polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE).	Producers and importers of electric and electronic devices, legislation
Restricted substances in Toys	Toys Directive 2009/48/EC	Restricts the presence of substances classified as a carcinogen, mutagen, reprotoxic.	Toys, legislation
BASTA, undesired substances in construction materials	BASTA, http://www.bastaonline.se	Restricts the presence of substances classified as a carcinogen, mutagen, toxic for reproduction, having effects during lactation, endocrine disrupting, PBT, vPvB, VOC, Lead (Pb), Mercury (Hg), Cadmium (Cd), ODS, Sensitising, Acute toxic, STOST, VOC, Environmentally hazardous.	Construction, voluntary standard
BREEAM, undesired substances in construction materials	BREEAM, International standard for new construction, https://www.breeam.com	Restricts use of materials, containing formaldehyde, VOC and carcinogenic substances Cat I A and IB.	Construction, voluntary standard
EU Ecolabel for all-purpose cleaners and sanitary cleaners	EU Ecolabel, http://ec.europa.eu/environment/ecolabel/products-groups-and-criteria.html	Restricted various substances hazardous to health and the environment.	Producers of detergent, voluntary standard

Annex V. Criteria and classification of substances restricted or banned via different frameworks

Properties of substances	Classification or criteria	Reference
Carcinogenic	category 1A or 1B (H350) category 2 (H351)	Classification, Labelling and Packaging (CLP) Regulation (EC) No 1272/2008)
Mutagenic	category 1A or 1B (H340) category 2 (H341)	
Toxic for reproduction	category 1A or 1B (H360) category 2 (H361)	
Effect during lactation	H362	
Endocrine disrupting substances	Category 1 - evidence of endocrine disrupting activity in at least one species using intact animals; Category 2 - at least some in vitro evidence of biological activity related to endocrine disruption;	Substances meeting criteria available here: http://ec.europa.eu/environment/chemicals/endocrine/strategy/substances_en.htm#priority_list Legislative proposal shall come soon.
PBT, Persistent, bioaccumulative and toxic substances	Substances with 1) a half-life > 60 days in marine water or >40 days in fresh- or estuarine water or > 180 days in marine sediment or >120 days in fresh- or estuarine sediment or >120 days in soil and 2) BCF (Bioconcentration Factor) >2000 l/kg (wet weight) and 3) Toxicity NOEC or EC10 < 0.01mg/l or H350, H340, H360, H361, H372, H373	Criteria defined in REACH 1907/2006, annex XIII
vPvB, very persistent and very bioaccumulative substances	Substances with 1) a half-life > 60 days in marine-, fresh- or estuarine water or > 180 days in marine-, fresh- or estuarine sediment or > 180 days in soil and 2) BCF (Bioconcentration Factor) >5000 l/kg (wet weight)	Criteria defined in REACH 1907/2006, annex XIII
ODS, Ozone depleting substances	H420	Classification, Labelling and Packaging (CLP) Regulation (EC) No 1272/2008)
Sensitising substances	H334	
Acute toxic substances	H300, H310, H330, H301, H311 or H331	
STOST, Substances with specific target organ toxicity	After single exposure H370, H371, H304 After repeated exposure H372, H373	
VOC, Volatile organic compounds	Substances having an initial boiling point less than or equal to 250 ^{O}C measured at a standard pressure of 101,3 kPa	The Paints directive, Directive 2004/42/CE on the limitation of emissions of VOC from paints and varnishes
Environmentally hazardous substances	Very toxic for aquatic life, H400 Very toxic to aquatic life with long lasting effects, category chronic 1 (H410) and chronic 2 (H411). May cause long lasting harmful effects to aquatic life, category chronic 4 (H413).	Classification, Labelling and Packaging (CLP) Regulation (EC) No 1272/2008)

Author

Jana Simanovska, Ecodesign Competence Centre

With input from

Dace Kavasa and **Māra Rēpele,** Ecodesign Competence Centre

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