Reporting requirements for chemical content, 2025-1

Our reporting requirements

Byggvarubedömningen's reporting requirements for construction materials, articles, and chemical products, are based on the so-called eBVD format; a format for construction product declarations (BVD) which has been developed by actors in the industry. Byggvarubedömningen has designed our application form based on the eBVD format, but we also have proactive additional requirements aiming to phase out chemicals with potential risks to health and the environment.

Material, article, product and substance

We sometimes use material as an overall description for different types of goods made of different materials such as plastic and metal. Legislation distinguishes between chemical products and article:

- An article is an object which, during production, acquires a particular shape, surface or design which determines its function to a greater extent than its chemical composition (definition according to REACH, Chapter 2, Article 33).
- A chemical product is a chemical substance or a mixture of chemical substances (definition according to Chapter 14, Section 2 of the Environmental Code (1998:808)).

The word substance is defined by ECHA, the European Chemicals Agency, as "a chemical element or its compounds in its natural state or as a result of a manufacturing process." Examples of substances are pigments, copper and methanol (https://echa.europa.eu/sv/support/substance-identification/what-is-a-substance).

At what stage should the content be recognised?

An article or chemical product is assessed as it is delivered to, for example, the construction site. If a template other than Byggvarubedömningen's application form is used, it must be designed for reporting articles or chemical products on delivery. Reporting of content for chemical products that change the composition of the content after installation because it is drying/curing, is therefore not a correct basis for assessing chemical content.

How should chemical content be reported?

An assessment is based on the content of an article or a chemical product on delivery where the chemical content is stated as a percentage by weight (wt%) of the entire article:

- For the levels Accepted and Recommended, classified substances must be reported in the documentation according to the reporting requirements, see Table 1, Reporting requirements for constituent substances.
- Self-classifications must be stated in the substance report of the assessment documentation.
- Substances that are not affected by properties according to Table 1 must always be reported when they occur in concentrations ≥2%.
- Constituent substances should primarily be reported by EC and/or CAS number. EC numbers are used for substances used on the EU market. A CAS number (Chemical Abstracts Service number) is a registration number for chemicals.

    - Exceptions are made for alloys where alloy numbers are usually required for correct reporting of substance content, see below.
- At least 98% of the product content should be declared.
    - To show that a substance(s) does not fulfil the declaration requirements in Table 1 and the content is below the declaration level, it should be declared by function, for example: filler <2% or solvent <2%.

Ranges

Content can be specified in concentration intervals and the assessment is made based on the content that gives the most strict assessment. Examples of accepted intervals are: ≤1%, 1-2.5%, 2.5-10%, 10-25%, 25-50%, 50-75% and 75-100%.

For chemical products, the concentrations stated in the safety data sheet are controlling, which means that the range stated in a building product declaration must include what is stated in the safety data sheet.

What can be included in the same assessment?

An assessment often applies to an article or chemical product. However, an assessment can also be made for a product series/product family provided that the articles included are covered by the same content declaration.

- The content is often stated in ranges. The assessment is then based on the content that gives the most stringent assessment.
- Unclassified substances that contribute with <2%, and that differ between products in a series can be covered by the same documentation and assessment. Ranges stated as 0 - ≥2% are therefore generally not accepted for a product series.
- For chemical products, all articles included in an assessment must be covered by the same safety data sheet and at the same time fulfil our reporting requirements.

Chemical products

Two- or multi-component chemical products

All components needed for the final product to fulfil its function must be assessed in the Construction Products Assessment. For two- or multi-component products, each component requires its own assessment and separate assessment documents. Exceptions can be made if the products are packaged in a way that makes it impossible to separate them. In this case information about both components can be provided in the same safety data sheet, if it is clear which information that belongs to which component. Criteria dealing with issues where the components are cured are assessed based on the properties of the cured product, such as the criteria for leaching, waste and emissions.

Articles

Article treated with chemical products

Articles treated with chemical products include, for example, impregnated wood, painted or lacquered articles, as well as other surface-treated articles. For impregnation, a safety data sheet must always be provided, regardless of concentration. For surface treatments, a safety data sheet must be provided for the chemical product if it constitutes ≥2% of the total product.

Material descriptions

Below are clarifications for certain materials. The information is not exhaustive but is intended to serve as guidance and support.

Alloys

Alloys must be reported by alloy number (EN, SS), or alternatively, substances above 0.01% in the alloy must be reported. For unspecified alloys, the following assumptions are made about content, which may affect the assessment result:

- Stainless steel or unspecified steel, it is assumed that the alloy contains 10% nickel.
- Brass, it is assumed that the alloy contains 3% lead.
- Aluminium, it is assumed that the alloy contains 1.5% lead.
- Bronze, it is assumed that the alloy contains 3% lead.
- Zamak, it is assumed that the alloy contains 0.005% lead, 0.005% cadmium and 0.02% nickel.

Plastics

All plastics contain one type of molecule, a polymer, which is built by monomers. Plastic materials must be reported by name so that it is clear which monomers are included, such as Acrylonitrile Butadiene Styrene (ABS) or polyethylene (PE). Polymers are reported by CAS and/or EU number when possible. Modified polymers need to be named to clarify which groups that have formed the polymer, for example silane/silyl-modified polymers and fluorinated polymers. Descriptions such as copolymer and thermoplastic are therefore not approved in the assessments.

Plastics contain different types of additives which are added to give plastics different properties, for example: fillers, plasticisers, flame retardants, pigments, stabilisers, lubricants, and antioxidants. What and how much is added varies between plastic types and applications.

- Note that plastic additives are substances that must be reported according to our reporting requirements, see Table 1, with CAS and/or EU numbers. This applies even if the polymer itself is unclassified and is included in a composite product in concentrations below 2 wt%, if an additive is included in concentrations above the reporting requirement.
- From the 2nd of September 2024, plastic stabilisers are exempted. It is encouraged to report stabilisers in plastics, but it is not mandatory. This exemption is limited in time for 2 years and will be evaluated again in the autumn of 2026. Note that all other additives must meet the reporting requirements.

Note that for smaller plastic parts, reconciliation of the content of, for example, plasticisers may be carried out. This is the case for plastic materials such as PVC, where reconciliation of any plasticisers is always carried out if that information is missing.

Rubber

Rubber is available both in naturally and synthetically produced form. Like plastics, rubber materials are composed of polymers and various types of additives. When rubber is

reported it must be clarified which monomers that build the polymer, for example ethylene propylene diene rubber (EPDM) and styrene butadiene rubber (SBR) rubber. Additives must be reported in the same way as for plastics (see above).

- As for plastics, the exemption for the additive group stabilizers applies for 2 years, see the point above this paragraph. Note that all other additives must meet the reporting requirements.

Examples of other materials that may require clarification include

- Recycled glass where lead content needs to be reported,
- Mineral wool, glass wool, glass fibre and similar where binders and other additives must be reported,
- Concrete where additives such as any polymers should be reported as a separate article,
- Mineral fillers, pigments, etc. where the CAS/EU number must be stated,
- Asphalt/bitumen that is reported ≥10% requires reporting of PAH content to be able to achieve the assessment Recommended,
- For cables, additives such as flame retardants and plasticisers should be specified,
- For impregnated/fireproofed wood, an attached safety data sheet for impregnation/fireproofing agents is required,
- Expanded polystyrene (EPS), cellular plastic, is always assumed to contain 2% pentane unless otherwise stated. Note that constituent flame retardants and other additives must be reported according to the reporting requirements,

Table 1. Reporting requirements for constituent substances.
Note that the following only applies to the reporting of substance content, the assessment criteria in their entirety can be read on the website (https://byggvarubedomningen.com/assessments/downloads/). The table for reporting according to the level Accepted follows the requirements of eBVD with additions for requirements concerning endocrine disruptors, nanomaterials and PFAS substances, see below. U = Phase out properties R = Risk reduction properties (according to PRIO).
In the reporting requirements, the highest content limit is 2%, even if the property's content limit in the criteria is higher, this is because *all* substances ≥2% must be reported.

Each constituent substance must be reported as wt% of the entire product if its concentration is equal to or exceeds the reporting limits specified below. If wt% is specified at component level, also the component's wt% of the entire product must be specified.		
Classification/listing	Reporting limit Accepted	Reporting limit Recommended
Unclassified substances and materials and all classifications that are not listed below	2%	2%
Carcinogenic, Category 1A or 1B (H350) U	0,1%	0,01%
Carcinogenic, Category 2 (H351) R	1%	0,1%

Mutagenic, Category 1A or 1B (H340) U	0,1%	0,01%
Mutagenic, Category 2 (H341) R	1%	0.1%
Reproductive toxicity, Category 1A or 1B (H360) U	0,3%	0,03%
Reproductive toxicity, Category 2 (H361) R	2%	0,3%
Reproductive toxicity, effects on or via lactation (H362) R	0,3%	0,03%
Endocrine disruptors according to the SIN-list or Candidate list [1,2] U	0,1%	0,01%
Endocrine disruptors for human health, category 1 (EUH380) U	0,1%	0,01%
Endocrine disruptors for human health, category 2 (EUH381) R	1%	0,1%
Environmental endocrine disruptors, category 1 (EH430) U	0,1%	0,01%
Endocrine disruptors for the environment, category 2 (EUH431) R	1%	0,1%
PBT substances (EUH440) U	0,1%	0,01%
vPvB substances (EUH441) U	0,1%	0,01%
PBT and/or vPvB substances [3,4] U	0,1%	0,01%
Potential vPvB and PBT substances[3] R	1%	0.1%
PMT substances (EUH450) U	0,1%	0,01%
vPvM substances (EUH451) U	0,1%	0,01%
PMT and/or vPvM substances [3,4] U	0,1%	0,01%
PFAS substances [3] U	>0%	>0%
Ozone depleting substances (EUH 059, H420) U	0,1%	0,01%
Sensitisation, respiratory category 1A (H334) U	0,1%	0,01%
Sensitisation, respiratory category 1 or 1B (H334 solid/liquid) U	1%	0,1%
Sensitisation, respiratory category 1 or 1B (H334 gas) U	0,2%	0,02%

Sensitisation, skin category 1A (H317) U	0,1%	0,01%
Sensitisation, skin category 1 or 1B (H317) R	1%	0,1%
Acute toxicity, Category 1 (H300, H310, H330, H301, H311 and/or H331) H330 is R	0,1%	0,01%
Acute toxicity, Category 2 (H300, H310, H330, H301, H311 and/or H331) H330 is R	1%	0,1%
Acute toxicity, Category 3 (H300, H310, H330, H301, H311 and/or H331) H330 is R	2%	1%
Specific Target Organ Toxicity – Single Exposure (STOT-SE), Category 1 (H370) R	1%	0,1%
Specific Target Organ Toxicity – Single Exposure (STOT-SE), Category 2 (H371)	2%	1%
Specific Target Organ Toxicity – Repeated Exposure (STOT-RE), Category 1 (H372) R	1%	0,1%
Specific Target Organ Toxicity – Repeated Exposure (STOT-RE), Category 2 (H373)	2%	1%
Hazardous to the aquatic environment, category acute 1 (H400)	2%	2%
Hazardous to the aquatic environment, category chronic 1 (H410) R	2%	0,25%
Hazardous to the aquatic environment, category chronic 2, 3, 4 (H411, H412, H413) H413 is R	2%	2%
Fluorinated greenhouse gases U	0,1%	0,01%
Pure or compounds of lead (Pb) U	0,1%	0,01%
Pure or compounds of mercury (Hg) U	Contamination ≥ 2.5 mg/kg (ppm) and any active added mercury must always be reported.	
Pure or compounds of cadmium (Cd) U	0,01%	0,001%
Candidate list, to be reported at component level[5]	>0.1% (component level)	>0.01% (component level)
Nanomaterials[6]	Nanomaterials added to achieve a specific function should be reported.	

Substances covered by any of the above specified classifications, but which are also covered by specific concentration limits in accordance with CLP.	According to specific concentration limits if lower than specified above *(Applies to, for example, certain preservatives)*	10 times lower than specific concentration limit

References

[1]Chemsec's SIN Lista, EDC Substances: https://sinlist.chemsec.org
[2]Candidate List, endocrine disrupting substances: https://echa.europa.eu/sv/candidate-list-table
[3] Substances that meet the criteria in accordance with KEMI, PRIO: https://www.kemi.se/prioguiden/english/start/prio-criteria-for-phase-out-substances-and-priority-risk-reduction-substances
[4]Candidate List substances: https://echa.europa.eu/candidate-list-table
[5]Substances on the Candidate List, https://echa.europa.eu/candidate-list-table. For composite articles, substances on the Candidate List are required by law to be reported at component level. Information about this can be found on ECHA's website. https://echa.europa.eu/regulations/reach/candidate-list-substances-in-articles.
[6]According to the ECHA definition: https://euon.echa.europa.eu/sv/definition-of-nanomaterial

Substances that must not be present for Recommended

For the possibility of assessing Recommended regarding chemical content, so-called specially designated substances/substance groups must not be present in the product regardless of content, see Table 2.

Table 2.
Specifically indicated substances must not have been added to the product during production or formed through reactions between the substances in the product to qualify for Recommended assessment level.

Substance group/Substance
Arsenic and its compounds[1]
Brominated flame retardants
Organotin compounds
Biocidal product applied on products (surface treatments) to provide a disinfectant or anti-bacterial effect.

[1] Arsenic, or arsenic compounds, are not permitted to be added to the product. Contamination of used raw materials is not permitted to exceed 10 mg/kg. The concentration limit is set based on regulatory requirements for soil quality to ensure that products assessed as Recommended do not raise background concentrations through their use or disposal (for example; sludge from sewage treatment works Swedish Ordinance 1998:944, Section 20).