# CRITERIA DOCUMENT BASTA-SYSTEM

**VERSION 33.1** 

If differences occur between the English and Swedish version of the criteria document, the Swedish version is always superior to the English version.

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## INTRODUCTION

## **ABOUT THE BASTA SYSTEM**

The BASTA system's vision is that construction products are free of hazardous substances, they are based on renewable resources and can be circulated. BASTA supports the construction industry's sustainability work by defining requirements, spreading knowledge, and making information and tools available to facilitate conscious product choices.

The BASTA system provides support for sustainable product choices in several aspects – such as chemical content linked to health and environmental hazards, circularity, renewability, and environmental effects.

The BASTA system is an open system that gives anyone who wants to make conscious product choices access to quality-assured assessments of products. The products registered in the BASTA system receive a grade based on the criteria met. The different grades are a good guide for making sustainable product choices.

The criteria in the system are transparent and scientifically based and harmonised with European chemicals legislation, Regulation ((EG) 1907/2006) of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Regulation ((EG) 1272/2008) on Classification, Labelling and Packaging of substances and mixtures (CLP) and the Swedish Chemicals Agency's PRIO tool.

The BASTA system's criteria go beyond the legislation but never against:

- The BASTA system's concentration limits are set based on the legal limits for classification
- Where the legislation only covers chemical products, the BASTA system also covers articles
- The BASTA system has concentration limits or information requirements for substances
- The BASTA system has criteria that cover the registering company and ensure that they have sufficient competence and procedures to maintain assessments and registrations over time
- BASTA performs audits of companies where the organization's and products' criteria fulfilment are examined

# **JOIN THE BASTA SYSTEM** AND REGISTER PRODUCTS

The following section describes the process of joining the BASTA system and how to assess and register products.

## 1. READ THE CRITERIA DOCUMENT AND CONTRACT TERMS TO JOIN THE BASTA SYSTEM

Before a company joins the BASTA system and register its products, it is important to read the criteria document and the terms for registering products, which are contained in the agreement concluded between the company that wants to register products and BASTAonline AB.

## 2. ASSESSMENT AND DOCUMENTATION

It is the company's obligation to assess whether products to be registered meet the system's criteria and to save assessments along with the documents used. To register a product in the BASTA system, the company must meet the criteria described under the criteria area "Organisation" and the product must be assessed against all criteria under the criteria area "Health and environmental hazards". When registering, it must be stated which of the criteria the product meets, and which it does not. In order to make the assessment, the company must have complete documentation that shows whether the content of the product meet the criteria. How assessment is to be carried out and how assessment data is to be handled is described in criteria O2: "Assessment and documentation" in the criteria area "Organisation".

## 3. CONNECT THE COMPANY TO THE BASTA SYSTEM

When the assessment is made and documentation has been compiled, the company can join the BASTA system. This is done through the following steps:

- 1. Create a personal user account at BASTAonline, via www.BASTAonline.se
- 2. Log in to the user account
  - a. If the company has already joined the BASTA system, select "Connect to a company". This sends a request to connect to your company's existing users
  - b. If the company has not joined the BASTA system, select "Register new company" to create a new company. The company is activated when the agreement to join the BASTA system has been signed by the company and BASTAonline AB. The agreement contains the conditions that must be followed to be connected to the BASTA system

## 4. REGISTER PRODUCTS

When the company is activated on BASTA online, users linked to the company can register products. Products must be registered at the article level, which means that each unique product must be registered as its own article. Example: if a product is available in three sizes, 1 litre, 5 litres and 10 litres, they should be registered as 3 articles.

A company can have multiple users registering and managing registered products. Registration can be done via manual entry or via an import file. All products registered shall be assessed and documented according to criteria O2: "Assessment and documentation" in the criteria area "Organisation".

## 5. UPDATING REGISTERED PRODUCTS

The company is obliged to ensure that assessments are updated if the composition of the product changes, the constituent substances gets a changed classification or if the BASTA system's criteria are updated. See criteria O3: "Update of assessment in case of changes" in the criteria area "Organisation".

## 6. AUDIT

Companies that have joined the BASTA system must approve that BASTA online AB has audits carried out to check that assessments and documentation are correct. The audits also cover the company's subcontractors. See criteria 04: "BASTA audit" in the criteria area "Organisation".

The BASTA system's criteria are divided into different Companies registering products must also meet criteria areas. To register a product in the BASTA system, it is mandatory to assess and declare whether the product meets the criteria in the criteria area "Health and environmental hazards".

the criteria in the criteria area "Organisation".



**Health and** environmental hazards



**Organisation** 

For the following criteria areas, it is optional to assess and declare criteria fulfilment:



**Circularity** 



**Renewability** 



**Environmental** effects



**Emissions** and tests

# HEALTH AND ENVIRONMENTAL HAZARDS (MANDATORY)



This criteria area is the basis of the BASTA system and limits substances with different health and environmentally hazardous properties. The criteria area comprises 35 criteria which are divided into 11 areas.

When registering a product in the BASTA system, it is mandatory to assess and declare which of the criteria are met and which are not. Depending on the criteria met in this criteria area, the registered product receives a specific grade.

## **GRADES**

In order for a product to receive a certain grade, specific criteria must be met, this is described under each criterion and in the summary of the criteria for health and environmental hazards. The rating levels provide guidance on a product's health and environmental performance without the need to check which individual criteria the product meets in order to make a sustainable product choice.

## The BASTA system's grades are:

#### **Grade BASTA**



The BASTA grade is the highest level in the system. Products that meet this level meet criteria that limits phase-out substances and risk reduction substances according to the Swedish Chemicals Agency's "PRIO tool".

## **Grade BETA**



The BETA grade is the second highest level in the system. Products that meet this level meet criteria that limits phase-out substances according to the Swedish Chemicals Agency's "PRIO tool".

#### **Grade DECLARED**



Products registered with this grade do not meet all criteria to reach the BASTA or BETA grade. In order to register a product as DECLARED, full knowledge of the product's content and what criteria are fulfilled or not is required. For products registered as DECLARED, information is displayed about which criteria are met or not met. This provides the person making the product selection with information to be able to evaluate whether the product should be used or not.

#### **Grade BETA to BASTA**



This grade only applies to chemical products that are chemically altered when used, for example via curing or drying. The grade means that the product meets the grade BETA upon delivery, but that in its built-in stage meets the grade BASTA.

#### **Grade DECLARED to BASTA**



This grade only applies to chemical products that are chemically altered when used, for example via curing or drying. The grade means that the product meets the grade DECLARED on delivery, but that in its built-in stage it meets the grade BASTA.

## PRODUCT GROUP



#### **ELECTRONICS**

Products that contain components where complete content information is missing cannot be registered in any of the BASTA system's grades as this requires complete content information.

Not having complete content information is common for construction products that contain electronics and/or electronic components. For this type of product to be registered, there is the product group ELECTRONICS. The purpose of the product group is to provide the opportunity for simplified declaration where the proportion of the product that meets different levels is reported. Products registered in this product group must comply with the RoHS directive.

When registering, the weight proportion of the product that meets the respective level is declared in the order listed below:

## Grade: BASTA

Describe the proportion (by weight%) of the product that meets the grade BASTA

#### Grade: BETA

Describe the proportion (by weight%) of the product, in addition to the proportion that meets the BASTA grade, that meets the grade BETA

## > Grade: DECLARED

Describe the proportion (by weight%) of the product, in addition to the proportion that meets the BASTA and BETA grade, that meets the grade DECLARED

## > RoHS

Describe the proportion (by weight%) of the product, in addition to the proportion that meets any of the grades above, that meets the RoHS Directive

## Unknown

Please describe the proportion (by weight%) of the product that does not meet any of the above levels

## METHODOLOGY FOR ASSESSMENT

## **Assessment and documentation**

In order to assess whether the criteria are met, the joined company needs knowledge of the product's constituent substances. The company can ensure this by having full knowledge of the content itself or by obtaining guarantees from its sub suppliers via the sub supplier declaration.

To facilitate assessment and documentation, BASTA has developed an assessment template that can be found on BASTA's website under "Documents". This can be used to document the constituent substances in the product, which criteria are met, and which documentation that has been used for the assessment. It is possible to make your own assessment documentation as long as it contains information about the constituent substances and which criteria that are met.

How an assessment is to be carried out and how assessment data is to be handled is described in criterion O2: "Assessment and documentation" in the criteria area "Organisation".

## Calculation of the concentration of a substance

The concentrations of constituent substances are calculated based on the content of the product, as it is delivered to the construction site or equivalent. Chemicals that have been used in the manufacture but are not retained in the delivered product shall not be taken into account. If the product also contains propellant, such as in aerosols that is released by means of a propellant in sprays, it is the application that determines whether the propellant is to be included or not. BASTA follows how propellant gas is handled within CLP, see guidance regarding this on BASTA's website. For two-component products, the content shall be calculated for each component. If the components are sold separately, they must be registered as two separate products.

With product we mean any of the three options below.

## 1. Chemical products

A chemical product consists of a substance or mixture consisting of two or more substances. For chemical products, the content of constituent substances in the product is calculated based on the content of the product when it is delivered to the construction site.

## 2. Articles

An article is, according to the definition of REACH, Chapter 2 Article 3, an 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. For articles, the content of constituent substances in the article is calculated based on the content of the article when it is delivered to the construction site.

#### 3. Assembled articles

An assembled article is an article that has been assembled together by two or more articles, see definition of an article. For assembled articles, the assessment of compliance with the criteria shall be based on the content of the substance(s) in each individual article. The assessment of compliance shall not be based on the content of the assembled article, unless expressed under an individual criterion.

## **Concentration limit**

All criteria in the criteria area "Health and environmental hazards" have concentration limits. If a substance (or summation of substances for certain criteria) exceeds a concentration limit, see "Calculation of the concentration of a substance" above, the criterion is not met. The concentration limits in the BASTA system refer to individual substances unless there are specific summation rules specified for the individual criterion.

The concentration limits are, where possible, based on concentration limits for classification of substances in the chemicals legislation CLP. When summarising substances in mixtures, classification rules are applied to mixtures according to CLP. Where CLP specifies a limit value for classification of the product, the BASTA system applies that limit value as a concentration limit for constituent substances. The concentration limit applies to intentionally added substances as well as reaction products and impurities, unless otherwise specified under the specific criterion.

## **Concentration limit for substances with specific concentration limits**

CLP sets specific concentration limits for certain substances. This means that these substances have a different classification limit than the general classification limits.

In line with CLP, these specific concentration limits are also applied in the BASTA system. This means that if a substance has a specific concentration limit for classification, the specific concentration limit is used as the concentration limit for the relevant criterion in the BASTA system. This applies both to substances with harmonised classification and non-harmonised classification (self-classification) as well as substances to be summarised.

Information on substances and any specific concentration limits can be found in CLP Annex VI and is searchable via https://echa.europa.eu/ under information on classification and labelling "C&L". For products that have a safety data sheet, information on constituent substances is provided in section 3.

## **Example of substances with specific concentration limits:**

Substance "2-methylisothiazolin-3(2H)-one" with CAS No 2682-20-4 has a specific concentration limit.

In ECHA's database https://echa.europa.eu/, you can view the following information via the "C&L Inventory":

Classification		Labelling			Specific Concentration limits,	Notes
Hazard Class and Category Code(s)	Hazard Statement Code(s)	Hazard Statement Code(s)	Supple- mentary Hazard Statement Code(s)	Pictograms, Signal Word Code(s)	M-Factors, Acute Toxicity Estimates (ATE)	
Acute Tox. 3	H301	H301	EUH071	GHS09	Skin Sens. 1A; H317: C≥ 0,0015 %	
Acute Tox. 3	H311	H311		GHS05		
Skin Corr, 1B	H314	H314		GHS06		
Eye Dam. 1	H318			Dgr	M=10	
Skin Sens. 1A	H317	H317			M(Chronic)=1	
Acute Tox. 2	H330	H330				
Aquatic Acute 1	H400					
Aquatic Chronic 1	H410	H410				

The table above shows that there is a specific concentration limit for the hazard class skin sensitiser category 1A H317, "Skin Sens. 1A; H317", which applies from a concentration greater than or equal to 0.0015% (15 ppm).

This means that the specific concentration limit of 15 ppm replaces the concentration limit for the criterion H7.C: Skin sensitiser - Category 1A (H317) for this substance, which must therefore not be present above 15 ppm if the product is to fulfil this criterion.

## Classification of chemical products through testing

If a chemical product has been tested according to CLP for a classification that is covered by the BASTA system's criteria and the test result has led to a classification other than that based on the classification of constituent substances, it is the result of the test classification that should be compared with the relevant criteria.

## **Calculation and summation rules**

If substances are to be summarised for a criterion, this means that the substances in the product covered by the criterion are to be added together and that it is the total concentration that is to be compared with the concentration limit.

The calculation and summation rules applied in the BASTA system are based on the rules in the CLP Regulation, (EG) No 1272/2008. For a better understanding of these rules, please read the "Guidance on the Application of the CLP Criteria" available for download here: https://echa.europa.eu/guidance-documents/guidance-on-clp.

## **Declaration levels**

There are two Declaration levels, which level to apply is described under each criterion.

The declaration levels are:



Declaration of whether or not the criterion is met

## Declaration with information requirements

Declaration of whether or not the criterion is met. If the criterion is not met, information shall also be provided on the substance or substances causing the non-compliance with the criterion. This information shall include:

- Name of the substance(s)
- > CAS or EC number of the substance(s) (If CAS or EC number exists for the substance)
- Weight% range of substance(s)

The background to the two different levels of declaration is that for certain criteria it is considered particularly relevant to provide users with more information about which substances exceed the concentration limit. This may be because declaration of these substances is required for environmental certifications, or that there is reason for special monitoring of substances that are under investigation as substances of very high concern and are deemed to be subject to future restrictions in the legislation.

# SUMMARY OF THE CRITERIA FOR HEALTH AND ENVIRONMENTAL HAZARDS

(If a substance has a specific concentration limit in CLP, this applies instead of the concentration limit below) Criteria that must be met to reach the respective grade

LARED

## Declaration level:

R Declaration of whether the criterion is met

Declaration of whether the criterion is met. If the criterion is not met and the substance or substances causing the non-compliance with the criterion

				BAST		DECI	with the criterion		
Areas	Criteria	a	Concentration limit (weight%)	BASTA	BASTA	BASTA	Declaration level:	Summation	
CMR	<u>H1.A</u>	Carcinogenicity – Category 1A or 1B (H350)	0,1%	•	•	0	R		
<u>-</u> <u>-</u>	<u>H1.B</u>	Carcinogenicity – Category 2 (H351)	1%	•	-		R		
	<u>H1.C</u>	Germ cell mutagenicity – Category 1A or 1B (H340)	0,1%	•	•	-	R		
	<u>H1.D</u>	Germ cell mutagenicity – Category 2 (H341)	1%	<b>②</b>			R		
	<u>H1.E</u>	Reproductive toxicity – Category 1A or 1B (H360)	0,3%	<b>②</b>	<b>②</b>	-	R		
	<u>H1.F</u>	Reproductive toxicity – Category 2 (H361)	3%	lacksquare			R		
	<u>H1.G</u>	Reproductive toxicity – Additional category for effects on or via lactation (H362)	0,3%	<b>②</b>	•	-	R		
Endocrine disrupting	<u>H2.A</u>	Endocrine disrupting	0,1%	igoredown	<b>②</b>		R		
disrupting	<u>H2.B</u>	Substances excluded from criteria H2.A	0,1%	-		-	0		
	H2.C	Substances listed in the EDS database	0,1%				•		
PBT	<u>H3.A</u>	Persistent, bio accumulative and toxic substances (PBT)	0,1%	<b>Ø</b>	•	-	R		
	<u>H3.B</u>	Very persistent and very bio accumulative substances (vPvB)	0,1%	•	•	-	R		
	<u>H3.C</u>	Potentially PBT or vPvB – CoRAP	0,1%				•		
	<u>H3.D</u>	PFAS	0,1%	-	-	-	•		
Particularly hazardous	<u>H4.A</u>	Lead or compounds of lead (Pb)	0,1%	<b>②</b>			R	Yes	
metals	<u>H4.B</u>	Lead or compounds of lead (Pb) + exemption for moving parts of machine steel	0,1% + 0,35%	•	•	-	R	Yes	
	<u>H4.C</u>	Mercury or compounds of mercury (Hg)	Total Ban	lacksquare	<b>②</b>		R	Yes	
	<u>H4.D</u>	Cadmium or compounds of cadmium (Cd)	0,01%	<b>②</b>	•		R	Yes	
Hazardous to the ozone layer	<u>H5.A</u>	Hazardous to the ozone layer – Category 1 (H420) or regulation ((EG) 1005/2009)	0,1%	•	<b>②</b>	-	R		
Fluorinated greenhouse gases	<u>H6.A</u>	Fluorinated greenhouse gases – F-gases	0,1%	•	•	-	R		
Sensitising	<u>H7.A</u>	Respiratory sensitisers – Category 1A (H334)	0,1%	<b>②</b>	•	-	R		
	<u>H7.B</u>	Respiratory sensitisers – Category 1 and 1B (H334)	0,2% gases 1% solid-/liquid phase	<b>②</b>	<b>②</b>	-	R		
	<u>H7.C</u>	Skin sensitisers – Category 1A (H317)	0,1%	•	<b>②</b>		R		
	<u>H7.D</u>	Skin sensitisers – Category 1 and 1B (H317)	1%	•	-	-	R		
Toxicity	H8.A	Acute toxicity – Category 1, 2 or 3 <b>1. Oral</b> (H300, H301) <b>2. Dermal</b> (H310, H311)	Refers to the product's classification	•	-	-	R	Yes	
	H8.B	<b>3. Inhalation</b> (H330, H331)  Specific target organ toxicity (single exposure) – Category 1 (H370)	1%	•			R		
	<u>H8.C</u>	Specific target organ toxicity (single	10%	•			R		
	<u>H8.D</u>	exposure) – Category 2 (H371)  Aspiration toxicity – Category 1 (H304) – Applies only to chemical products	Refers to the product's classification	<b>Ø</b>	0	-	R	Yes	
	<u>H8.E</u>	Specific target organ toxicity (repeated exposure) – Category 1 (H372)	1%	<b>Ø</b>	-	-	R		
	<u>H8.F</u>	Specific target organ toxicity (repeated exposure) – Category 2 (H373)	10%	•	-	-	R		
VOC	<u>H9.A</u>	Volatile organic compounds (VOC)	10%	<b>②</b>			R	Yes	
Environmen- tally hazardous	<u>H10.A</u>	Hazardous to the aquatic environment – Category Acute 1 (H400)	Refers to the product's classification	•	-	-	R	Yes	
		Hazardous to the aquatic environment – Category Chronic 1 or 2, (H410) or (H411)	Refers to the product's classification	<b>②</b>	-	-	R	Yes	
0 111		Hazardous to the aquatic environment – Category Chronic 4 (H413)	Refers to the product's classification	<b>Ø</b>	-	-	R	Yes	
Candidate List	<u>H11.A</u>	Substances on the Candidate List	0,1%				0		

**CRITERIA** 

# **HEALTH AND ENVIRONMENTAL HAZARDS**



Which criteria that needs to be fulfilled for each grade are specified under each criterion below, two options are available:

- Must be fulfilled Means that the criteria must be fulfilled for the product to pass the grade
- Must be declared Means that the criteria do not have to be fulfilled for the product to pass the grade, but criteria fulfilment must be reported at registration

## H1: CMR - Carcinogenic, mutagenic or toxic to reproduction

**H1.A** 

Criterion: Ca	Criterion: Carcinogenicity – Category 1A or 1B (H350)					
Concentration limit:	Declaration level:	Substances to be summarised:	Grade			
0,1%	R Declaration	No	BASTA	BETA	DECLARED -	

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class 'Carcinogenicity - Category 1A or 1B' (H350 - May cause cancer) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

## Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

**H1.B** 

Criterion: Ca	rcinogenicity –	Category 2 (H351	-)		ID: H1.B
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
1%	R Declaration	No	BASTA	BETA -	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class "Carcinogenicity - Category 2" (H351 - Suspected of causing cancer) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration <u>limits for substances with specific concentration limits</u>" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

#### **H1.C**

Criterion: Germ cell mutagenicity – Category 1A or 1B (H340)					ID: H1.C
Concentration limit:	Declaration level:	Substances to be summarised:	Grade		
0,1%	R Declaration	No	BASTA SASTA	BETA	DECLARED —

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class "Germ cell mutagenicity – Category 1A or 1B" (H340 – May cause genetic defects) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

#### H<sub>1.D</sub>

Criterion: Ge	Criterion: Germ cell mutagenicity – Category 2 (H341)					
Concentration limit:	Declaration level:	Substances to be summarised:	Grade :			
1%	R Declaration	No	BASTA	BETA -	DECLARED -	

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class "Germ cell mutagenicity – Category 2" (H341 – Suspected of causing genetic defects) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

## Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

## Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for risk-reduction substances.

#### **H1.E**

Criterion: Re	Criterion: Reproductive toxicity – Category 1A or 1B (H360)				
Concentration limit:	Declaration level:	Substances to be summarised:	Betyg		
0,3%	R Declaration	No	BASTA	BETA	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class 'Reproductive toxicity - Category 1A or 1B' (H360 - May damage fertility or the unborn child) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

#### H1.F

<b>Criterion: Re</b>	Criterion: Reproductive toxicity – Category 2 (H361)					
Concentration limit:	Declaration level:	Substances to be summarised:	Grade			
3%	R Declaration	No	BASTA	BETA —	DECLARED -	

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class 'Reproductive toxicity - Category 2' (H361 - Suspected of damaging fertility or the unborn child) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration <u>limits for substances with specific concentration limits</u>" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for risk-reduction substances.

#### **H1.G**

Criterion: Re	Criterion: Reproductive toxicity – Additional category for effects on or via lactation (H362)								
Concentration limit:	Declaration level:	Substances to be summarised:	Grade d:						
0,3%	R Declaration	No	BASTA	BETA	BASTA DECL	ARED -			

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class "Reproductive toxicity – Additional category for effects on or via lactation" (H362 - May cause harm to breast-fed children) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

## Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

## Connection to the Swedish Chemicals Agency's PRIO tool:

## **H2:** Endocrine disrupting

<b>Criterion: En</b>	docrine disrupt	ing			ID: H2.A
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
0,1%	R Declaration	No	BASTA	BETA	DECLARED —

#### Criteria fulfilment:

Substances meeting the criteria for being endocrine disrupting according to BASTAs methodology, are not present at concentrations equal to or above the concentration limit.

The methodology consists of three steps: A, B and C. In each step, substances that are endocrine disruptors are identified according to BASTA's methodology. To facilitate identification of these substances, all topics are summarized in BASTA's document "Substance list - Ämneslista", see more information under the section "Verification of criteria fulfilment" below.

#### Step A - Evaluation according to EU criteria

If a substance has been assessed as an endocrine disruptor according to 'Step A', the substance must not be present in a concentration above the concentration limit to meet this criterion (H2. A). Substances are covered by Step A if any of the following

- 1. The substance is on the "Candidate List" of the REACH legislation due to endocrine disrupting properties (Article 57f)
- 2. The substance has been classified as an endocrine disruptor by ECHA according to the EU definition for endocrine disruptors
- 3. The substance has been classified as an endocrine disruptor by self-classification according to the EU definition of endocrine disruptors

EU definition of endocrine disruptors: Commission delegated regulation (EU) 2017/2100 and Commission regulation (EU) 2018/605. Summary of EU criteria for endocrine disruptors (criteria 1, 2 and 3 to be met):

- 1. it shows an adverse effect in [an intact organism or its progeny]/[non-target organisms], which is a change in the morphology, physiology, growth, development, reproduction or life span of an organism, system or (sub)population that results in an impairment of functional capacity, an impairment of the capacity to compensate for additional stress or an increase in susceptibility to other influences
- 2. it has an endocrine mode of action, i.e. it alters the function(s) of the endocrine system
- 3. the adverse effect is a consequence of the endocrine mode of action

If a substance has been evaluated by the EU and assessed as 'non-endocrine disruptor' according to the EU definition of endocrine disruptors, the substance is not covered by 'Step B or Step C'.

#### Step B - Substances are listed on specific lists

If a substance is not covered by Step A, the substance shall be assessed according to Step B.

If a substance falls under 'Step B', the substance must not be present in a concentration above the concentration limit to meet this criterion (H2. A). Substances are covered by step B if any of the following criteria are met:

- 1. The substance is listed on CoRAP (Community Rolling Action Plan) for endocrine disrupting properties. The list can be accessed from ECHA's website: https://echa.europa.eu/. Both substances that are included in CoRAP for evaluation, as well as substances that have been evaluated with a positive outcome, are covered
- 2. The substance is listed in the Danish Centre for Endocrine Disruptors' list, tables 8 and 13 in the "List of EDC". See www.cend.dk for more information
- 3. The substance is included on ChemSec's SIN list due to endocrine disrupting properties. See www.sinlist.chemsec.org for more

If a substance is covered by Step B, they must not be present in the product in concentrations equal to or above the concentration limit unless exempted by BASTA under "Step C".

#### Step C - The exception of BASTA

If a substance is covered by Step B, the substance must be checked against BASTA's exemption list which is available on BASTA's website and in BASTA's document "Substance list – Ämneslista", see more under "Verification of criteria fulfilment" below.

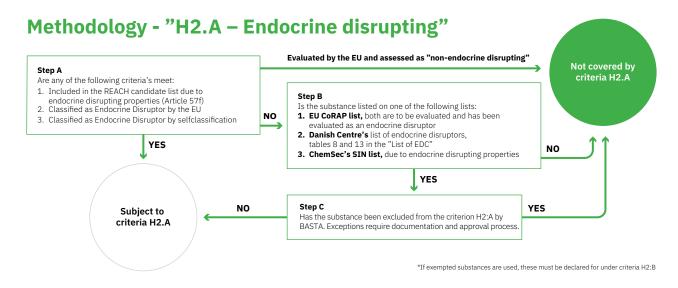
If the substance is on the exclusion list, the substance is not covered by this criterion (H2.A). However, the presence of the exempted substance shall be reported according to criterion H2.B.

In order for exemptions to be approved, documentation must be submitted to BASTAonline AB that allows an assessment to be made. More about this process is described on BASTA's website.

#### Criterion: Endocrine disrupting

**ID: H2.A** 

#### Visualization of the methodology



#### Background:

The methodology described above was developed in collaborative projects with the industry against the background that endocrine disruptors are not yet covered by classification and labelling according to CLP. The methodology is described in detail in the report: "Guidance document for handling criteria for endocrine disruptors in the construction industry" (IVL report B2369, 2020).

#### Full names for the EU definition of endocrine disruptors

- Commission delegated regulation ((EU) 2017/2100) of 4 September 2017 setting out scientific criteria for the determination of endocrine-disrupting properties pursuant to Regulation ((EU) 528/2012)
- Commission regulation ((EU) 2018/605) of 19 April 2018 amending Annex II to Regulation ((EC) 1107/2009) by setting out scientific criteria for the determination of endocrine disrupting properties

A list of all substances listed on CoRAP can be found on the website: https://echa.europa.eu/information-on-chemicals/evaluation/community-rolling-action-plan/corap-table

#### **Danish Centre for Endocrine Disruptors**

Substances evaluated as endocrine disruptors by the Danish Centre for Endocrine Disruptors are included in the report http://www.cend.dk/files/DK ED-list-final 2018.pdf.

Check the substance against Table 8 and Table 13. Detailed documentation on topics can be found in the annex to the report http://www.cend.dk/files/DK\_ED-list-final\_appendix1\_2018.pdf.

#### SIN list

Substances on the SIN list due to endocrine disrupting properties are shown in the SIN list database at https://sinlist.chemsec.org.

It is possible to search directly by CAS number, EC number or substance name and to filter the search results with endocrine disrupting properties.

## Verification of criteria fulfilment:

Check substances against BASTA's document "Substance list - Ämneslista" which is published on www.bastaonline.se.

Criteria fulfilment can also be checked against each list/organization's own databases, see links above. The sources databases are always superior to BASTA's substance list.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

Please note that BASTA's criteria is more extensive than the PRIO tool.

#### **H2.B**

#### Criterion: Substances excluded from criteria H2.A **ID: H2.B** Concentration Grade **Declaration level: Substances** limit: to be summarised: Declaration BETA -0,1% BASTA -DECLARED with information No requirements

#### Criteria fulfilment:

Substances exempted under "Step C" in criteria "H2.A – Endocrine disrupting" are not present at concentrations equal to or above the concentration limit.

Substances present at concentrations equal to or above the concentration limit shall be declared at registration.

#### Verification of criteria fulfilment:

Check substances against BASTA's document "Substance list – Ämneslista" which is published on www.bastaonline.se.

Current substances covered by the exemption are also available at: http://www.bastaonline.se/endocrine-disrupting/.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

#### H2.C

Criterion: Su	Criterion: Substances listed in the EDS database					
Concentration limit:	Declaration level:  i Declaration	Substances to be summarised:		Grade		
0,1%	with information requirements	No	BASTA —	BETA -	DECLARED —	

#### Criteria fulfilment:

Substances meeting the criteria for "Overall assessment Cat 1 or Cat 2 in the EDS Database" in EU:s EDS Database are not present at concentrations equal to or above the concentration limit.

Substances present at concentrations equal to or above the concentration limit shall be declared at registration.

#### Background:

This criterion is included in the BASTA system as it is used in certification systems for buildings. For example, in Miljöbyggnad and BREEAM-SE.

#### Verification of criteria fulfilment:

Check substances against BASTA's document "Substance list - Ämneslista" which is published on www.bastaonline.se. In the file there is also an extract of the EDS database in its entirety.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

## H3: PBT - Persistent, bio accumulative or toxic

Criterion: Persistent, bio accumulative and toxic substances (PBT) **ID: H3.A** Concentration Declaration Substances Grade limit: level: to be summarised: BASTA BETA DECLARED 0,1% (R) Declaration Nο

#### Criteria fulfilment:

**H3.A** 

Substances meeting the criteria listed in 1, 2 and 3 below are not present at concentrations equal to or above the concentration limit.

- 1. Persistence: Half-life according to one of the following:
  - > 60 days in marine water
  - > 40 days in fresh- or estuarine water
  - > 180 days in marine sediment
  - > 120 days in fresh- or estuarine sediment
  - > 120 days in soil
- 2. Bioaccumulation: BCF (Bio Concentration Factor) > 2000 l/kg (wet weight)
- 3. Toxicity: According to a or b:
  - a. NOEC or EC10 <0,01 mg/l
  - b. Classified according to one of the following:
    - i. Carcinogenicity category 1A or 1B (H350)
    - ii. Germ cell mutagenicity category 1A or 1B (H340)
    - iii. Reproductive toxicity category 1A, 1B or 2 (H360 or H361)
    - iv. Specific target organ toxicity (repeated exposure) category 1 or 2 (H372 or H373)

## Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. Use ECHA's database and look under the substance's "Substance infocard" to find information about PBT properties. For chemical products, this information can also be found in the product's safety data sheet.

#### Background:

The definition is taken from Annex XIII of Regulation (EG) No 1907/2006 of the European Parliament and of the Council (REACH Regulation).

#### Connection to the Swedish Chemicals Agency's PRIO tool:

#### Criterion: Very persistent and very bio accumulative substances (vPvB) **ID: H3.B** Concentration Declaration **Substances** Grade limit: to be summarised: level: BASTA BETA 0,1% (R) Declaration No

#### Criteria fulfilment:

Substances meeting the criteria listed in 1 and 2 below are not present at concentrations equal to or above the concentration limit.

- 1. Very persistent: Half-life according to one of the following
  - > 60 days in marine-, fresh- or estuarine water
  - > 180 days in marine-, fresh- or estuarine sediment
  - > 180 days in soil
- 2. Very bio accumulative: BCF (Bio Concentration Factor) > 5000 l/kg (wet weight)

#### Verification of criteria fulfilment:

Use ECHA's database and look under the substance's "Substance infocard" to find information about PBT properties. For chemical products, this information can also be found in the product's safety data sheet.

#### Background:

The definition is taken from Annex XIII of Regulation (EG) No 1907/2006 of the European Parliament and of the Council (REACH Regulation).

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

H3.C

<b>Criterion: Po</b>	Criterion: Potentially PBT or vPvB – CoRAP				ID: H3.C
Concentration limit:	Declaration level:  Declaration	Substances to be summarised:	BASTA (-)	Grade	☐ DECLARED —
0,1%	with information requirements	No	BASTA BASIA	BETA —	BASTA DECLARED —

#### Criteria fulfilment:

Substances listed on CoRAP which are 'To be evaluated' or which have been 'Evaluated' because they are:

- Potentially persistent, bio accumulative and toxic compound (PBT)
- Potentially very persistent and very bio accumulative compound (vPvB)

Are not present at concentrations equal to or above the concentration limit.

Substances present at concentrations equal to or above the concentration limit shall be declared at registration.

#### Verification of criteria fulfilment:

Check substances against BASTA's document "Substance list - Ämneslista" which is published on www.bastaonline.se.

Compliance with criteria can also be checked against CoRAP, Community rolling action plan, can be found on ECHA's website: https://echa.europa.eu/sv/information-on-chemicals/evaluation/community-rolling-action-plan/corap-table.

The list includes substances that have been or will be evaluated within ECHA. The list can be filtered to find substances that are on the list because they are potentially persistent, bio accumulative and toxic organic substances (PBTs) or potentially very persistent and very bio accumulative substances (vPvB). The source database is always superior to BASTA's list.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

**H4.A** 



#### Criteria fulfilment:

PFAS, according to the definition below, are not present at concentrations equal to or above the concentration limit.

Substances present at concentrations equal to or above the concentration limit shall be declared at registration.

#### Definition of PFAS

The PFASs that contain in their molecule one or more fragments, consisting of a perfluorinated carbon chain that has a chain length of at least two carbon atoms (C2), with bonds to optional atoms or groups of atoms.

#### Background:

This distinction follows the Swedish Chemicals Agency's information requirement regulations on the notification of PFAS to the product register, see KIFS 2018:4.

#### Verification of criteria fulfilment:

See the Swedish Chemicals Agency's PRIO tool with searchable database for substances classified as PFAS, www.kemi.se/prioguiden.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

## H4: Particularly hazardous metals



## Criteria fulfilment:

Lead or compounds of lead are not present at concentrations equal to or above the concentration limit.

#### Calculation and summation rules:

Summation of the total content of lead; In the case of lead compounds, only the content of lead needs to be counted.

#### Verification of criteria fulfilment:

Control of substances in the product, information can be found in safety data sheets (for chemical products) or in product declarations (for articles). If there is no complete content, the sub supplier declaration must be used.

## Connection to the Swedish Chemicals Agency's PRIO tool:

#### Criterion: Lead or compounds of lead (Pb) + exemption for moving parts of machine steel **ID: H4.B** Concentration Declaration **Substances** Grade limit: to be summarised: level: BASTA V BETA DECLARED -0,1% and (R) Declaration Yes 0.35%

If criterion H4.A is fulfilled, this criterion is fulfilled automatically.

#### Criteria fulfilment:

#### Non-moving parts:

Lead or compounds of lead are not present at concentrations equal to or above the concentration limit 0,1%. (Same criterion as H4.A).

#### Moving parts (Exceptions):

Lead or compounds of lead are not present at concentrations equal to or above the concentration limit 0,35% for components included in moving parts of the machine steel where fatigue resistance is required, e.g. espagnolettes.

Lead or compounds of lead are not present in concentrations equal to or above 0.1% in the product.

#### Calculation and summation rules:

Summation of the total content of lead in the component; In the case of lead compounds, only the content of lead needs to be counted.

#### Verification of criteria fulfilment:

Control of substances in the product, information can be found in safety data sheets (for chemical products) or in product declarations (for articles). If there is no complete content, the sub supplier declaration must be used.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

**H4.C** 

#### Criterion: Mercury or compounds of mercury (Hg) ID: H4.C Grade Concentration Declaration Substances limit: level: to be summarised: Total Ban\* BASTA V BETA V DECLARED (R) Declaration Yes

## Criteria fulfilment:

Mercury or mercury compounds are not to be present in the product, regardless of content. The ban applies to products where mercury has been used or added.

\*Low concentrations of mercury that are not intentionally added in any stage thus fall outside the prohibition, but such traces/contamination of mercury should not exceed 2.5 mg/kg. Deviations exceeding 2.5 mg/kg are permitted in cases where they stem from natural occurrence in coal, ore or ore concentrate.

#### Calculation and summation rules:

Summation of the total mercury content. In the case of mercury compounds, only the content of mercury needs to be counted.

#### Verification of criteria fulfilment:

Control of substances in the product, information can be found in safety data sheets (for chemical products) or in product declarations (for articles). If there is no complete content, the sub supplier declaration must be used.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

#### Criterion: Cadmium or compounds of cadmium (Cd) ID: H4.D Grade Concentration Declaration **Substances** limit: to be summarised: level: BASTA BETA 🗸 0,01% (R) Declaration Yes

#### Criteria fulfilment:

Cadmium or compounds of cadmium are not present at concentrations equal to or above the concentration limit.

#### Calculation and summation rules:

Summation of the total cadmium content. In the case of cadmium compounds, only the content of cadmium needs to be counted.

#### Verification of criteria fulfilment:

Control of substances in the product, information can be found in safety data sheets (for chemical products) or in product declarations (for articles). If there is no complete content, the sub supplier declaration must be used.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

## H5: Hazardous to the ozone layer

**H5.A** 

#### Criterion: Hazardous to the ozone layer – Category 1 (H420) or regulation ((EG) 1005/2009) ID: H5.A Concentration Declaration Substances Grade limit: level: to be summarised: BASTA BETA DECLARED 0,1% (R) Declaration Nο

#### Criteria fulfilment:

Substances meeting the criteria listed in 1 or 2 below are not present at concentrations equal to or above the concentration limit:

- 1. Hazardous to the ozone layer Category 1" (H420 Harms public health and the environment by destroying ozone in the upper atmosphere)
- 2. Listed in Annex I or II to Regulation (EG) No 1005/2009 of the European Parliament and of the Council)

#### Background:

According to the "Guidance on the Application of the CLP Criteria", a substance is defined as ozone-depleting if the ODP (Ozone Depletion Potential) is equal to or greater than 0.005.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances. For chemical products, this information can also be found in the product's safety data sheet.

Control substances listed in Annexes I and II to Regulation (EG) No 1005/2009 of the European Parliament and of the Council: 

#### Connection to the Swedish Chemicals Agency's PRIO tool:

## H6: Fluorinated greenhouse gases

#### **H6.A**

Criterion: Fluorinated greenhouse gases – F-gases				ID: H6.A	
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
0,1%	R Declaration	No	BASTA	BETA	DECLARED -

#### Criteria fulfilment:

Substances that are Synthetically produced fluorinated gases (f-gases) and listed in Annex I to Regulation (EU) 517/2014 of the European Parliament and of the Council) are not present at concentrations equal to or above the concentration limit.

#### Background:

Fluorinated greenhouse gases (F-gases) are a group of gases most commonly used to replace substances that can deplete the ozone

They do not destroy the ozone layer but are very potent greenhouse gases that are thousands of times more powerful than carbon dioxide and contribute to global warming. Fluorinated greenhouse gases include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6).

#### Verification of criteria fulfilment:

Substances covered are contained in Regulation (EU) 517/20149 of the European Parliament and of the Council) Annex I,  $\underline{\text{https://eur-lex.europa.eu/legal-content/$\overline{SV/TXT/PDF/?uri=CELEX:02014R0517-20140609\&from=EN.}}$ 

See also the Swedish Chemicals Agency's PRIO tool with searchable database for substances covered by the criterion for greenhouse gases: https://www.kemi.se/prioguiden/start

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

## **H7:** Sensitising

#### H7.A

Criterion: Respiratory sensitisers – Category 1A (H334)				ID: H7.A	
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
0,1%	R Declaration	No	BASTA	BETA	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class 'Respiratory sensitisers - Category 1A' (H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

## Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

#### Criterion: Respiratory sensitisers – Category 1 and 1B (H334) ID: H7.B Concentration Declaration **Substances** Grade limit: level: to be summarised: 0,2% gases (R) Declaration No BASTA BETA DECLARED -1% solid-/ liquid phase

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class "Respiratory sensitisers – Categories 1 and 1B" (H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

#### H7.C

Criterion: Skin sensitisers – Category 1A (H317)					ID: H7.C
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
0,1%	R Declaration	No	BASTA	BETA	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class "Skin sensitisers - Category 1A" (H317 - May cause an allergic skin reaction) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information

## Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for phase-out substances.

#### H7.D

<b>Criterion: Sk</b>	Criterion: Skin sensitisers – Category 1 and 1B (H317)				ID: H7.D
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
1%	R Declaration	No	BASTA SASTA	BETA —	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class "Skin sensitisers - Categories 1 and 1B" (H317 - May cause an allergic skin reaction) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

## **H8:** Toxicity

#### Criterion: Acute toxicity – Category 1, 2 or 3 **ID: H8.A** Declaration Concentration Substances Grade limit: level: to be summarised: The product must (R) Declaration Yes, and it shall be not meet the criteria carried out for each BASTA BETA -DECLARED for the hazard class relevant route of "Acute toxicity exposure Category 1, 2 or 3"

#### Criteria fulfilment:

The ATE<sub>RI</sub> value of the product, according to the summation rules below, is higher than the ATE value (for the relevant routes of exposure) that gives the product classification 'Acute toxicity - Category 3' (for the relevant routes of exposure).

Summation does not need to be done to check against categories 1 and 2 as category 3 is the most stringent category. ATE place Acute Toxicity Estimate for the mixture, the lower ATE<sub>BI</sub>-value the more toxic.

In the case of inhalation, calculations shall be performed for each relevant form substances may have in the air (gas, vapor, mist /

The ATE of the product shall be calculated for all relevant routes of exposure, as determined by the classification of the constituent substances. A product without substances classified as acutely toxic automatically meets this criterion.

The ATE value, for each route of exposure, that gives the product classification Acute toxicity, Category 3 according to CLP are:

- 1. Oral ATE,: 300
- 1. Dermal ATE<sub>RI</sub>: 1000
- 1. Inhalation
  - a. Gas ATE<sub>BI</sub>: 2500
  - b. Vapor ATE<sub>RI</sub>: 10
  - c. Mist/dust ATE<sub>RI</sub>: 1,0

Example: A chemical product containing one substance classified acute toxic dermal and oral, and another substance classified acute toxic dermal means that the ATE value of the product must be calculated for oral and dermal exposure. Inhalation in this case is not considered a relevant route of exposure.

Calculation shall be made based on substances meeting the criteria for the hazard class "Acute toxicity - Category 1, 2 or 3":

- 1. Oral (H300 Fatal if swallowed or H301 Toxic if swallowed)
- 1. Dermal (H310 Fatal in contact with skin or H311 Toxic in contact with skin)
- 1. Inhalation (H330 Fatal if inhaled or H331 Toxic if inhaled)

#### Calculation and summation rules:

#### ATE value of the mixture

If the toxicity of a mixture is not tested, it can be estimated from the toxicity of the constituent substances by calculating the ATE of the mixture.

This is done by adding the ATE values of the constituent substances (often LD50 or LC50 depending on the route of exposure) and their constituent concentrations in the product together according to the formula below. A description of how this is to be done can be found in: "Guidance on the Application of the CLP Criteria", Section 3.1: https://echa.europa.eu/guidance-documents/guidance-on-clp

$$\frac{100}{ATE_{Bl}} = \sum_{i=1}^{N} \frac{C_i}{ATE_i}$$

Where:

is the number of substances which are classified as acute toxicity in category 1, 2 and 3 (H300, H310, H330, H301, H311 Ν or H331)

represent each such substance

C, is the concentration in weight (%) of each such substance (i) in the product

ATE. is the acute toxicity for each substance (i) in the product

ATE<sub>BI</sub> is the calculated acute toxicity of the mixture

**H8.A** 

#### Criterion: Acute toxicity - Category 1, 2 or 3

**ID: H8.A** 

#### Summation by route of exposure

Summation shall be performed for each relevant route of exposure for which the substances show toxicity - oral, dermal and inhalation. Furthermore, in the case of inhalation, calculations shall be performed for each relevant form substances may have in the air (gas, vapor, mist/ dust).

#### Data missing

If the product contains substances that lack acute toxicity data (i.e. LD50 or LC50 values), further guidance may be provided in: "Guidance on the Application of the CLP Criteria", Section 3.1.

Table 3.1.2 of Annex I to CLP Regulation (EG) No 1272/2008, sets out the point estimates that can be used for the calculation of ATE<sub>o</sub> for each classification category and for each route of exposure.

Exposure routes	Classification Category	Converted acute toxicity point estimate, $ATE_{\scriptscriptstyle i}$
Oral (mg/kg body weight)	Category 1	0,5
	Category 2	5
	Category 3	100
Dermal (mg/kg body weight)	Category 1	5
	Category 2	50
	Category 3	300
Inhalation of gases (ppmV)	Category 1	10
	Category 2	100
	Category 3	700
Inhalation of vapours (mg/l)	Category 1	0,05
	Category 2	0,5
	Category 3	3
Inhalation of dust/mist (mg/l)	Category 1	0,005
	Category 2	0,05
	Category 3	0,5

## Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

## Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for risk-reduction substances.

#### H8.B

Criterion: Specific target organ toxicity (single exposure) – Category 1 (H370)					ID: H8.B
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
1%	R Declaration	No	BASTA	BETA -	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class 'Specific target organ toxicity (single exposure) - Category 1' (H370 - Causes damage to organs) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

#### H8.C

Criterion: Specific target organ toxicity (single exposure) – Category 2 (H371)					ID: H8.C
Concentration limit:	Declaration level:	Substances to be summarised:	Grade		
10%	R Declaration	No	BASTA V	BETA -	DECLARED —

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class 'Specific target organ toxicity (single exposure) - Category 2' (H371 - May cause damage to organs) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration <u>limits for substances with specific concentration limits</u>" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

#### H8.D

Criterion: Aspira	tion toxicity – C	Category 1 (H304)	– Applies only to	chemical produ	cts ID: H8.D
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
The product must not meet the criteria for the hazard class "Aspiration Toxicity - Category 1" (H304)	R Declaration	Yes	BASTA 🗸	BETA -	DECLARED —

#### Criteria fulfilment:

The product (only applies to chemical products) does not meet the criteria for the hazard class "Aspiration Toxicity – Category 1" (H304 – May be fatal if swallowed and enters airways).

#### Calculation and summation rules:

The product's summarised concentration of substances that meets the criteria for the hazard class:

"Aspiration Toxicity – Category 1" (H304 – May be fatal if swallowed and enters airways) is not equal to or greater than 10% and the mixture has a kinematic viscosity lower than or equal to 20,5 mm<sup>2</sup>/s, measured at 40 °C.

Summation rules come from CLP and in the case of interpretations, it is the rules in CLP that apply.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

## Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

#### H8.E

Criterion: Sp	ID: H8.E				
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
1%	R Declaration	No	BASTA	BETA —	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class Specific target organ toxicity (repeated exposure) – Category 1' (H372 – Causes damage to organs through prolonged or repeated exposure) are not present at concentrations equal to or above the concentration

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

#### Criterion: Specific target organ toxicity (repeated exposure) – Category 1 (H372)

**ID: H8.E** 

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for risk-reduction substances.

#### H8.F

Criterion: Sp	ategory 2 (H373)	ID: H8.F			
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
10%	R Declaration	No	BASTA V	BETA —	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria for the hazard class Specific target organ toxicity (repeated exposure) - Category 2' (H373 -May cause damage to organs through prolonged or repeated exposure) are not present at concentrations equal to or above the concentration limit.

For substances with specific concentration limits in CLP, these shall be applied instead of the concentration limit. See "Concentration limits for substances with specific concentration limits" for more information.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances and any specific concentration limits. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

## H9: VOC - Volatile organic compounds

**H9.A** 

Criterion: Volatile organic compounds (VOC)					ID: H9.A
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
10%	R Declaration	Yes	BASTA	BETA —	DECLARED -

#### Criteria fulfilment:

Substances meeting the criteria listed in 1 and 2 below shall be added together. The total content shall not be equal to or higher than the concentration limit.

- 1. Organic substances initial boiling point <250 °C measured at a standard pressure of 101,3
- 2. Organic substances meeting the criteria for any of the following hazard statements:
- · Acute toxicity Category 1 or 2 (H330 Fatal if inhaled)
- · Acute toxicity Category 3 (H331 Toxic if inhaled)
- Acute toxicity Category 4 (H332 Harmful if inhaled)
- · Specific target organ toxicity (single exposure) Category 2 (H371 May cause damage to organs)
- · Specific target organ toxicity (single exposure) Category 3 (H336 May cause drowsiness or dizziness)
- Specific target organ toxicity (repeated exposure) Category 2 (H373 May cause damage to organs through prolonged or repeated exposure)

#### Calculation and summation rules:

Summation of substances meeting criteria 1 and 2 above.

#### Criterion: Volatile organic compounds (VOC)

ID: H9.A

#### Background:

The initial boiling point is set on the basis of Directive 2004/42/EC. The concentration limit has been set based on industry agreements for paints, varnishes, and adhesives. In cases where there are lower content limits specified in KIFS 2017:7 or 2004/42/ EC with current changes for paints and varnishes, these apply.

The hazard statements selected in this criterion concern only properties hazardous to health.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database to view substance classifications, which provides information on the H-phrases of substances. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

## **H10:** Environmentally hazardous

H10.A

#### Criterion: Hazardous to the aquatic environment – Category Acute 1 (H400) ID: H10.A Concentration limit: Declaration **Substances** Grade level: to be summarised: The product must not meet the criteria (R) Declaration Yes for the hazard class BASTA BETA -DECLARED -" Hazardous to the aquatic environment - Category Acute 1 (H400)

## Criteria fulfilment:

The summarised concentration of substances of the product, according to the summation rules below, is not equal to or greater than

The summation is based on concentration of and M-factor for substances meeting the criteria for the hazard class:

• "Hazardous to the aquatic environment - Category: Acute 1" (H400 - Very toxic to aquatic life)

#### Calculation and summation rules:

The summation shall be based on substances meeting the criteria for the hazard class - "Hazardous to the aquatic environment – Category: Acute 1" (H400) if its concentration is greater than or equal to 0,1 divided by its M-factor (defined according to CLP), see below for further explanation.

- M-factor = 1 means that H400 substances should be included if their concentration ≥0.1%
- M-factor = 10 means that H400 substances should be included if their concentration ≥0.01%
- M-factor = 100 means that H400 substances should be included if their concentration ≥0,001%

The criterion is not met if the summation according to the equation below is equal to or greater than 25%.

$$\sum_{i}^{N} (C_i * M_i) \ge 25\%$$

#### Where:

- N is the number of substances to be taken into account in summation
- represents each such substances
- C. is the concentration by weight-% of each such substance (i)
- is the multiplying factor, which is often found in the substance's REACH dossier, C&L inventory or supplier's safety data sheet. If this is not the case, use the table below to determine the M-factor of substance (i)

## Criterion: Hazardous to the aquatic environment - Category Acute 1 (H400)

ID: H10.A

L(E)C50 value (mg/l)	M-factor
0,1 < L(E)C50 ≤1	M = 1
$0.01 < L(E)C50 \le 0.1$	M = 10
$0,001 < L(E)C50 \le 0,01$	M = 100
$0,0001 < L(E)C50 \le 0,001$	M = 1000

Continue in factor 10 intervals

#### Example:

A product contains, among other things, the substances below:

- Substance 1 is classified H400 with M = 1 and a concentration of 10%
- Substance 2 is classified H400 with M = 10 and a concentration of 1%
- Substance 3 is classified H400 with M = 1 and a concentration of 0.01%

In order to know whether substances 1, 2 and 3 should be included into account, the concentration of H400 substances shall be equal to or greater than the ratio of 0,1/M:

- Substance 1: 0.1/1 = 0.1 means that the substance should be included because 10% > 0.1
- Substance 2: 0.1/10 = 0.01 means that the substance should be included because 1% > 0.01
- Substance 3: 0.1/1 = 0.1 means that the substance should not be included because 0.01% < 0.1

$$\sum_{i}^{N} (C_i * M_i) = (C_{\ddot{a}mne\ 1} * M_1) + (C_{\ddot{a}mne\ 2} * M_2) = (10 * 1) + (1 * 10) = 10 + 10 = 20 < 25\%$$

The summarised content is less than 25%, which means that the criterion is met.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database or the substance's REACH dossier to see its classification and M-factor. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

#### H10.B

#### Criterion: Hazardous to the aquatic environment – Category Chronic 1 or 2, (H410) or (H411) ID: H10.B Concentration Declaration Grade Substances limit: level: to be summarised: (R) Declaration The product must Yes not meet the criteria for the hazard class BASTA DECLARED -BETA -' Hazardous to the aquatic environment: Chronic 1 or 2" (H410) or (H411)

#### Criteria fulfilment:

The summarised concentration of substances of the product, according to the summation rules below, is not equal to or greater than 25%.

The summation is based on concentration of and M-factor for substances meeting the criteria for the hazard classes:

- "Hazardous to the aquatic environment Category: Chronic 1" (H410 - Very toxic to aquatic life with long lasting effects)
- "Hazardous to the aquatic environment Category: Chronic 2" (H411 Toxic to aquatic life with long lasting effects)

#### Criterion: Hazardous to the aquatic environment – Category Chronic 1 or 2, (H410) or (H411) ID: H10.B

#### Calculation and summation rules:

The summation shall be based on substances meeting the criteria for the hazard class "Hazardous to the aquatic environment — Category: Chronic 1 or 2" (H410 or H411).

Substances classified H410 should be considered if their concentration is greater than or equal to 0,1 divided by its M-factor (defined according to CLP), see below for further explanation. Substances classified H411 shall be considered if their concentration is equal to or greater than 1%.

- M-factor = 1 means that H410 substances should be included if their concentration ≥0.1%
- M-factor = 10 means that H410 substances should be included if their concentration ≥0.01%
- M-factor = 100 means that H410 substances should be included if their concentration ≥0.001%

The criterion is not met if the summation according to the equation below is equal to or greater than 25%.

$$\sum_{j=1}^{S} M_i * C_j * 10 + \sum_{k=1}^{T} C_k \ge 25\%$$

Where:

- is the number of substances meeting the criteria for the hazard class S "Hazardous to the aquatic environment – Category: Chronic 1" (H410)
- is the number of substances meeting the criteria for the hazard class "Hazardous to the aquatic environment - Category: Chronic 2" (H411)
- represents each H410 substance in the product
- represents each H411 substance in the product
- is the concentration by weight % of each H410 substance in the product C,
- $C_{\nu}$ is the concentration by weight % of each H411 substance in the product
- is the multiplying factor, which is often found in the substance's REACH dossier, C&L inventory or supplier's safety data sheet. If this is not the case, use the table below to determine the M-factor of substance (i)

NOEC-value (mg/l)	M-factor (Non-rapidly degradable)	M-factor (Rapidly degradable)
$0.01 < (NOEC \text{ or } EC10) \le 0.1$	M = 1	-
$0,001 < (NOEC \text{ or } EC10) \le 0,01$	M = 10	M = 1
$0,0001 < (NOEC \text{ or } EC10) \le 0,001$	M = 100	M = 10
$0,00001 < (NOEC \text{ or } EC10) \le 0,0001$	M = 1 000	M = 100
$0,000001 < (NOEC \text{ or } EC10) \le 0,00001$	M = 10 000	M = 1 000
Continue in factor 10 intervals		

#### Example:

A product contains, among other things, the substances below:

- Substance 1 is classified H410 with M = 1 and a concentration of 10%
- Substance 2 is classified H410 with M = 1 and a concentration of 0.01%
- · Substance 3 is classified H411 with a concentration of 1%

In order to know whether substances 1 and 2 are to be included, the concentration of H410 substances shall be equal to or greater than the ratio of 0,1/M:

- Substance 1: 0.1/1=0.1 means that the substance should be included because 10%>0.1
- Substance 2: 0.1/1=0.1 means that the substance should not be included because 0.01%<0.1

In order to know whether substance 3 should be included, its concentration should be  $\ge 1\%$ :

• Substance 3: Concentration is 1%, which means that the substance should be included

$$\sum_{i=1}^{S} M_i * C_j * 10 + \sum_{k=1}^{T} C_k = (C_{\ddot{a}mne\ 1} * M_1 * 10) + C_{\ddot{a}mne\ 3} = (10 * 1 * 10) + 1 = 100 + 1 = 101 > 25\%$$

The summarised content exceeds 25%, which means that the criterion is not met.

#### Criterion: Hazardous to the aquatic environment – Category Chronic 1 or 2, (H410) or (H411) ID: H10.B

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database or the substance's REACH dossier to see its classification and M-factor. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion meet the PRIO tool's criteria for risk-reduction substances.

#### H10.C

Criterion: Hazardous to the aquatic environment – Category Chronic 4 (H413)				ID: H10.C	
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
The product must not meet the criteria for the hazard class "Hazardous to the aquatic environment: Chronic 4 (H413)	R Declaration	Yes	BASTA 🗸	BETA -	DECLARED —

#### Criteria fulfilment:

The summarised concentration of substances of the product, according to the summation rules below, is not equal to or greater than 25%.

The summation is based on concentration of substances meeting the criteria for the hazard class:

- "Hazardous to the aquatic environment Category: Chronic 1" (H410 - Very toxic to aquatic life with long lasting effects)
- "Hazardous to the aquatic environment Category: Chronic 2" (H411 - Toxic to aquatic life with long lasting effects)
- "Hazardous to the aquatic environment Category: Chronic 3" (H412 – Harmful to aquatic life with long lasting effects)
- "Hazardous to the aquatic environment Category: Chronic 4" (H413 – May cause long lasting harmful effects to aquatic life)

#### Calculation and summation rules:

The summarised concentration of substances meeting the criteria for the hazard class" Hazardous to the aquatic environment – Category: Chronic 1, 2, 3 or 4" (H410, H411, H412 or H413).

## Example:

A product contains, among other things, the substances below:

- Substance 1 is classified H410 with a concentration of 10%
- · Substance 2 is classified H411 with a concentration of 1%
- Substance 3 is classified H412 with a concentration of 0.1%
- Substance 4 is classified H413 with a concentration of 10%

Substance 1 + Substance 2 + Substance 3 + Substance 4 = 10 + 1 + 0, 1 + 10 = 21, 1 < 25%.

The summarised content is less than 25%, which means that the criterion is met.

#### Verification of criteria fulfilment:

Use ECHA's C&L Inventory database or the substance's REACH dossier to see its classification. For chemical products, this information can also be found in the product's safety data sheet.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Vissa Substances covered by this criterion meet the PRIO tool's criteria for risk-reduction substances.

## **H11:** Candidate List

H11.A

Criterion: Substances on the Candidate List			the Candidate List ID: H11./		
Concentration limit:	Declaration level:	Substances to be summarised:		Grade	
0,1%	Declaration with information requirements	No	BASTA —	BASTA BETA	DECLARED -

#### Criteria fulfilment:

Substances on the Candidate List (substances of very high concern (SVHC)) are not present at concentrations equal to or above the concentration limit.

Substances present at concentrations equal to or above the concentration limit shall be declared at registration.

#### Background:

Substances on the Candidate List, https://www.echa.europa.eu/sv/candidate-list-table, have been identified as SVHCs, i.e. substances of very high concern.

Substances on the Candidate List risk ending up in REACH Annex 14 or 17, which means that they may be subject to authorisation requirements or restrictions.

Examples of properties that lead to inclusion of a substance on the Candidate List are CMR substances, PBT substances, vPvB substances, endocrine disruptors, sensitisers, and specific target organ toxicity.

#### Verification of criteria fulfilment:

Check substances against BASTA's document "Substance list - Ämneslista" which is published on www.bastaonline.se.

Compliance with the criteria can also be checked directly against the Candidate List. The Candidate List is always superior to BASTA's substance list.

#### Connection to the Swedish Chemicals Agency's PRIO tool:

Substances covered by this criterion are not covered by the PRIO tool.

# ORGANISATION (MANDATORY)



01

## Criterion: Responsibility list and competence

ID: 01

#### Criteria fulfilment:

Persons within the company or contracted consultants, who carry out assessments of products, handle documentation and/or are responsible for registration in the BASTA system must have competence according to the list below:

- · Adequate knowledge of the substance content of the products in question
- · Adequate knowledge of the BASTA system's criteria
- · Adequate knowledge of health and environmental assessment of chemical substances and products
- · Adequate knowledge of REACH, the European regulatory system for chemicals control
- · Adequate knowledge of classification and labelling of chemical substances according to CLP

The competence must be documented in a responsibility list together with name, title and contact information. In the event of an audit, competence must be proven by presenting a transcript of education, CV or similar.

The company shall ensure that the responsibility list is updated in the event of personnel changes and that BASTAonline always has updated contact information for those responsible for registered products.

#### Verification of criteria fulfilment:

The responsibility list must be filled in before the registration of products and the company must be able to present the responsibility list in the event of an audit.

02

## **Criterion: Assessment and documentation**

ID: 02

#### Criteria fulfilment:

Assessment of criteria fulfilment and assessment basis shall be documented in an assessment overview. Assessment overview and assessment documentation must be archived and available as long as the company is connected to the BASTA system.

Assessment overview must be prepared in accordance with BASTAonline AB designated template or equivalent.

For products registered as "BETA to BASTA" and "DECLARED to BASTA", documentation must credibly demonstrate that the product undergoes a curing process/drying under the conditions that can be expected on a construction site and that in built-in mode it has a chemical content that meets the BASTA grade. Documentation can favourably be made in the form of two separate assessment overviews, one for the delivered product and one for the built-in product.

The assessment overview shall contain the following information:

- ${\tt 1. Constituent\ chemical\ substances\ in\ raw\ materials/materials/articles}$
- 2. CAS number or equivalent identification of substances
- 3. Concentration by weight of substances in the product (for assembled articles, the proportion by weight in each article must be reported and assessed)
- 4. Compliance with the criteria for each constituent substance
- 5. What assessment documentation the assessment is based on
- 6. Reference to assessment documentation and where it is stored

Exceptions for reporting CAS numbers can be made for unmodified naturally occurring raw materials such as minerals, wood and the like whose chemical properties are judged by the registrant to be irrelevant for the criteria fulfilment.

#### Criterion: Assessment and documentation

ID: 02

#### Assessment documentation

The documentation for the assessment may take the following form:

#### 1. Full knowledge of content

For products where the company itself has full knowledge of content, it is sufficient documentation for assessment.

#### 2. Safety Data Sheet

If there are safety data sheets for the product or contained substances issued in accordance with Council Regulation (EG) No 1907/2006, Title IV, they can serve as a basis for assessment.

If it is not clear from the safety data sheet that the product meets the criteria, for example because the reported substance content is not complete, the person who performs the registration shall request a separate "Sub supplier declaration" according to a template specified by BASTAonline AB or equivalent, which shows that the product meets the criteria. The person who registers products in the BASTA system must also ensure that the sub supplier can answer questions about the product during a BASTA audit.

#### 3. Sub supplier declaration

For registration of products that the company does not manufacture itself and where the manufacturer does not provide complete accounting of content, the person registering must have a signed "Sub supplier declaration", according to a template specified by BASTAonline AB or equivalent. The person who registers in the BASTA system must also ensure that the declaration received meets BASTA's criteria and that the subcontractor can answer questions about their declaration during a BASTA audit.

#### 4. Already registered product

If a product, or subcomponent of a product, already is registered in the BASTA system, reference to the registration can be used as a basis for assessment. However, the person who re-registers the product must obtain written confirmation from the company that originally registered the product which includes the following:

- That the registered product is the same as the one to be registered
- That if the registration status/criteria fulfilment changes for the registered product, this must be notified to the person who further registers the product

#### Verification of criteria fulfilment:

Assessment overview and assessment documents, must be available before registration of products and must be presented during an audit.

03

#### Criterion: Update of assessment in case of changes

ID: 03

#### Criteria fulfilment:

The Company shall update its assessment and registration of products if any of the following occurs:

- · The composition of the product changes
- Constituent substances are reclassified
- · The BASTA system's criteria are updated

BASTAonline AB has the right to update the BASTA system's criteria continuously. Changes that entail stricter criteria must be notified in writing at least six (6) months before they become mandatory. Companies that have joined the BASTA system are obliged to keep up to date on new criteria and to update assessments and registrations within six (6) months of updated criteria being announced.

#### Verification of criteria fulfilment:

During audits, it is checked that there is a written procedure that ensures that the criteria is met.

04

## **Criterion: BASTA audit**

ID: 04

#### Criteria fulfilment:

Companies that join the BASTA system and register products must allow audits according to the BASTA system.

During an audit, assessment and assessment documentation for a selection of registered products, responsibility list and competence as well as procedures for BASTA registrations are checked. Documentation from sub suppliers used in assessment is also covered in an audit.

## Verification of criteria fulfilment:

Allowing auditing when the company is selected for audit.

Criterion: Marketing ID: 05

#### Criteria fulfilment:

Companies connected to the BASTA system have the right to refer to their registered products as being registered in the BASTA system and meeting one of the BASTA system's grades or product groups in:

- · Documentation
- Direct connection to the product (for example, on shelf edges)
- · Annual report of the company
- · In other types of media

In text, it may only be stated that the company is connected to and has products registered in the BASTA system. Companies that have joined the BASTA system have the right to use BASTAonline AB's trademarks, for the BASTA system, grades, and product groups, in accordance with BASTA's graphic profile.

If products are marketed as registered in the BASTA system, the following two formulations must be used:

"Product name" is registered in the BASTA-system and fulfils the grade XXXX.

"A registration in the BASTA-system means that we can verify that this product meets the BASTA-systems criteria for the specific grade. See <a href="https://www.bastaonline.se">www.bastaonline.se</a> for more information about the systems criteria and the product's current registration status.

If the trademarks are misused, the following actions will be taken:

- Correction of usage will be required within a given timeframe. The length of the time frame will be assessed and set depending on the type of misuse and extent
- · Checks will be carried out on an ongoing basis to ensure that the incorrect use of the trademarks has been corrected or ceased

#### Verification of criteria fulfilment:

During an audit it is checked whether the company has marketed products registered in the BASTA system and, if so, it is controlled how they have been marketed.

# CIRCULARITY (OPTIONAL)



When registering, it is optional to report criteria fulfilment for this criteria area. Reporting of criteria fulfilment within this criteria area does not affect the product's grade.

#### C1

## Criterion: Circulated material

ID: C1

#### Criteria fulfilment:

If the product contains circulated material as defined below, the following information may be declared upon registration:

- 1. Share of circulated material expressed as % of total weight of product
- 2. Share of circulated material that is:
- Reused material/raw material in %
- Recycled material/raw material in % (100% of specified "Circulated material" shall be distributed among these items)
- 3. Share of recycled material/raw material originating from:
- Pre-consumer in %
- Post-consumer in % (100% of specified "Recycled material/raw material" shall be distributed among these items)

#### **Definitions:**

- · Circulated material: Material circulated by reuse or recycling
- Reuse: A non-waste product or component is used again to fulfil the same function for which it was originally intended. As defined in the Environmental Code, 1998:808 with amendment SFS:2020:601
- Recycled materials: Material from a product or component taken from the waste stream and returned to the production process. Intermediate steps such as collection, handling, purification and more may occur. As defined in ISO 14021:2017
- Pre-consumer recycled: The recycling step has taken place before the consumer stage, such as the collection and return of waste streams from production waste. Please note that the collection and re-introduction of residual material and waste that arises within the same production process shall not be included
- Post-consumer recycled: The recycling step has taken place after the consumer stage, for example through collection/return after a product has been used by the consumer

#### Verification of criteria fulfilment:

Information on compliance with the criteria shall be included in the assessment overview together with arguments for how this criterion is fulfilled.

#### C2

#### Criterion: Reuse ID: C2

#### Criteria fulfilment:

If the product can be reused as defined below, the following information may be declared upon registration:

• Share (weight-%) that can be reused

#### **Definition reuse:**

A non-waste product or component is used again to fulfil the same function for which it was originally intended. As defined in the Environmental Code, 1998:808 with amendment SFS:2020:601.

#### Verification of criteria fulfilment:

Information on compliance with the criteria shall be included in the assessment overview together with arguments for how this criterion is fulfilled.

## **Criterion: Material recycling**

ID: C3

#### Criteria fulfilment:

If the product is recyclable as defined below, the following information may be declared upon registration:

· Share (weight-%) that can be material recycled

#### Definition of material recycling:

Material from a product or component taken from the waste stream and returned to the production process. Intermediate steps such as collection, handling, purification and more may occur. As defined in ISO 14021:2017.

#### Verification of criteria fulfilment:

Information on compliance with the criteria shall be included in the assessment overview together with arguments for how this criterion is fulfilled.

#### **C4**

## Criterion: Circular business models

**ID: C4** 

#### Criteria fulfilment:

If the company has a circular business model for the product, the following information may be declared upon registration (one or more of the options below can be selected upon registration):

- The product can be disassembled, reassembled
- · A circular business model, or similar, exists for the product
- · Other way to support a circularity for the product exists

#### Verification of criteria fulfilment:

Information on compliance with the criteria shall be included in the assessment overview together with arguments for how this criterion is fulfilled.

# RENEWABILITY (OPTIONAL)



When registering, it is optional to report criteria fulfilment for this criteria area. Reporting of criteria fulfilment within this criteria area does not affect the product's grade.

## **Criterion: Renewability**

ID: F1

#### Criteria fulfilment:

If the product contains renewable raw materials/materials as defined below, the following information may be declared upon registration:

• Share (weight-%) of the product that comes from renewable materials/raw materials

#### Definition renewable raw materials/materials:

Renewable is defined as materials or raw materials that origin from biobased sources that are recreated at least as fast as they are consumed. Examples of renewable raw materials/materials: wood, starch, and cellulose. BASTA does not consider water as a renewable raw material. As defined in the ISO 14021:2017 standard.

#### Verification of criteria fulfilment:

Information on compliance with the criteria shall be included in the assessment overview together with arguments for how this criterion is fulfilled.

F1

# **ENVIRONMENTAL EFFECTS** (OPTIONAL)



When registering, it is optional to report criteria fulfilment for this criteria area. Reporting of criteria fulfilment within this criteria area does not affect the product's grade.

#### Criterion: Environmental product declaration - EPD

ID: M1

#### Criteria fulfilment:

M1

- · If a verified/third-party audited EPD (Environmental Product Declaration) in accordance with ISO 14025 (and EN 15804 if applicable) exists for the product, the following information may be declared upon registration:
- · If the information comes from a product specific or generic EPD
- · Functional unit
- · Amount of the product in the functional unit
- · Web address to published and verified EPD
- The following values as stated in your EPD. No recalculation needs to be carried out:
  - · GWP-f Climate Change fossil
    - For: A1-A3, A4, C1, C2, C3, C4, D
  - ODP
    - For: A1-A3, A4
  - - For: A1-A3, A4
  - · EP-fw Eutrophication aquatic freshwater
    - For: A1-A3, A4
  - POCP
    - For: A1-A3, A4
  - ADPE
    - For: A1-A3, A4
  - ADPF
    - For: A1-A3, A4

#### Background:

EP-fw: Eutrophication aquatic freshwater according to EN15804+A2 Eutrophication, freshwater [kg P eq]

#### Verification of criteria fulfilment:

Information on compliance with criteria shall be included in the assessment overview.

# **EMISSIONS AND TESTS** (OPTIONAL)



When registering, it is optional to report criteria fulfilment for this criteria area. Reporting of criteria fulfilment within this criteria area does not affect the product's grade.

**E1** 

#### **Criterion: Emission - VOC ID: E1**

#### Criteria fulfilment:

If the product has undergone volatile organic compound (VOC) emission testing, the following should be declared upon registration:

- 1. Obtained certificate (for instance EMICODE EC1plus/EC1/EC2, Blue Angel, M1/M2 (RTS), GUT, AgBB)
- 2. Measurement method/standard (for instance ISO 16000-9, ISO 16000-10, ISO 16000-6, ISO 16000-3, EN 16516, EN 717-1, CDPH Standard Method v1.1)
- 3. Measured content expressed in unit [µg/m3]

#### Verification of criteria fulfilment:

Information on criteria fulfilment must be included in the assessment overview and a complete test report must be available as documentation.

**E2** 

## Criterion: Emission - Formaldehyde

ID: E2

#### Criteria fulfilment:

If the product has undergone emission testing for formaldehyde, the following should be declared upon registration:

- 1. Measurement method/standard (for instance ISO 16000-9, ISO 16000-10, ISO 16000-6, ISO 16000-3, EN 16516, EN 717-1, CDPH Standard Method v1.1)
- 2. Measured content expressed in unit [mg/m³]

#### Verification of criteria fulfilment:

Information on criteria fulfilment must be included in the assessment overview and a complete test report must be available as documentation.

**E3** 

## Criterion: Emission – CMR

ID: E3

## Criteria fulfilment:

If the product has undergone emission testing for carcinogenic volatile organic compounds of categories 1A and 1B, the following should be declared upon registration:

- 1. Measurement method/standard (for instance ISO 16000-9, ISO 16000-10, ISO 16000-6, ISO 16000-3, EN 16516, EN 717-1, CDPH Standard Method v1.1)
- 2. Measured content expressed in unit [mg/m<sup>3</sup>]

#### Verification of criteria fulfilment:

Information on criteria fulfilment must be included in the assessment overview and a complete test report must be available as documentation.

## Criterion: Leaching into drinking water - 4MS

ID: E4

#### Criteria fulfilment:

For products tested according to "4MS – Leaching of lead into drinking water", the following should be declared upon registration:

- 1. The product is approved according to 4MS Leaching of lead into drinking water is less than 5 μg/l.
- 2. Information on the lead content of the copper alloy in the following ranges:
- The 4MS approved copper alloy contains ≤ 0,25% Lead
- The 4MS approved copper alloy contains >0,25-0,8% Lead
- The 4MS approved copper alloy contains >0,8% Lead
- 3. Results from the 4MS report expressed in unit  $[\mu g/l]$

For more information: Approval and Harmonization – 4MS Initiative | Umweltbundesamt.

#### Verification of criteria fulfilment:

Information on criteria fulfilment must be included in the assessment overview and a complete 4MS-test report must be available as documentation.

## **DEFINITIONS**

## Article – According to REACH

According to the definition in REACH, Chapter 2 Article 3, an 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. After an object has become an article in its own right during the production process, it will remain an article until it finally becomes waste after finished use.

In order to determine whether an article meets a criterion, the content of the substances contained in the article needs to be reconciled with the criteria.

## **Article – Registration of articles in the BASTA-system**

An item is a specific version of a product, specific article number. For example, it can be a specific size or length. When registering, each individual article must be registered separately.

## **Assembled articles**

An assembled article is an article that has been assembled together by two or more articles.

For assembled articles, the assessment of compliance with the criteria shall be based on the content of the substance(s) in each individual article. The assessment of compliance shall not be based on the content of the assembled article.

For assembled articles, articles consisting of several articles as described above, the assessment of compliance with the criteria shall be based on the concentration of the substance in the individual article containing the substance, i.e. the assessment of compliance with the criteria shall not be based on the content of the assembled article.

For more information about what is an article, alternatively assembled article, see:

- KEMI's website about REACH and articles: https://www.kemi.se/lagar-och-regler/reach-forordningen/reach-och-varor
- > ECHA Short Guide "Requirements for Substances in Articles": https://echa.europa.eu/documents/10162/23036412/nutshell guidance articles2 sv.pdf/16e1cf2a-de07-488b-9bc3-5445ce53e967
- ECHA "Guidance on requirements for substances in articles": <a href="https://echa.europa.eu/do-">https://echa.europa.eu/do-</a> cuments/10162/23036412/articles sv.pdf/a4c1ece3-83e2-3d16-0584-5b74a26d97ae

## **Chemical product**

A chemical product is a chemical substance or preparation of chemical substances that is not an article.

## **CLP**

Regulation (EG) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures,

https://eur-lex.europa.eu/legal-content/SV/TXT/PDF/?uri=CELEX:02008R1272-20210510&from=sv.

## **Mixture**

Mixture or solution composed of two or more substances.

## **Product**

In the BASTA system, products refer to both articles and chemical products.

## REACH

Regulation (EG) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, https://eur-lex.europa.eu/legal-content/sv/TXT/PDF/?uri=CELEX:02006R1907-20210101.

## Substance

Element or compound of elements in the natural state or obtained by any manufacturing process, including any additive necessary to preserve its stability and any impurity deriving from the manufacturing process, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

## **VERSION HISTORY**

The update to this version from version 2022:A1 has not resulted in stricter criteria or addition of new mandatory criteria. The changes implemented compared to the criteria for BASTA, BETA and DECLARED version 2022:A1 are that the structure has been changed and that all the criteria documents, together with the guide for endocrine disruptors and calculation and summation rules have been merged into one criteria document.

At the same time, the criteria for organization (previously only in the agreement between joined companies and BASTAonline), circularity, renewability, environmental effects and emissions and tests have been added to the document. With the merge, the criteria has also been given a new numbering, on BASTA's website there are help documents that describe the connection between the old numbering and the new.

## CONCLUSION

The links provided in the document may be updated beyond BASTAonline's control. BASTAonline is not responsible for ensuring that the links are updated at all times but refers to the respective source. The criteria are continuously reviewed to adapt to new legislation, knowledge, and objectives.



The BASTA system was started in 2004 through a project supported by the European Commission's LIFE fund LIFE03/ENV/S/00094. The criteria in the BASTA system were then part of the "Kretsloppsrådets" joint action plan. Since 2007, the BASTA system is run by BASTAonline AB, which is owned by IVL Swedish Environmental Research Institute and The Swedish Construction Federation

Information about products that meet the criteria is available in an open database that can be accessed via www.bastaonline.se, BASTA's logbook service or via BASTA's open API. Contact BASTAonline by e-mail to bastaonline@ivl.se or by phone 010-788 65 00 for further information