



Revision of the EU ecolabel for textile products
Summary of proposed Hazardous Substances criteria
(with reference to Criteria proposals 10, 11 and 12)

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<p>Summary: The aim of this paper is to summarise the proposals for how the revised EU Ecolabel criteria for textile products will address Hazardous Substances.</p> <p>The proposal (published 6th September 2012) is that three new interlinked criteria are introduced which interpret Articles 6(6) and 6(7) of the Ecolabel Regulation (EC) 66/2010. The criteria would work as follows:</p> <p><u>Criterion 10: Hazardous substances</u> - This would introduce the standard legal text as used for other product groups.</p> <p>The requirements of Criterion 10 would then be implemented by Criteria 11 and 12. It is understood that Criteria 10 may not be required if Criteria 11 and 12 provide sufficient interpretation of Articles 6(6) and 6(7) of the Regulation.</p> <p><u>Criterion 11: Restricted Substance List</u> - This would create a blacklist of substances. The list would represent a consolidation of existing Ecolabel substance restrictions, substances restricted by REACH, substance on the ECHA Candidate List and proposals from stakeholders.</p> <p><u>Criterion 12: Substitution of hazardous substances in dyeing, printing and finishing</u> – This would restrict substances which may be present on the final product that are classified with specific listed hazard statements.</p> <p>The use of classified substances would depend on the degree of hazard:</p> <ul style="list-style-type: none">- Substances classified with <u>Category A</u> hazards would be completely restricted;- Substances classified with <u>Category B</u> hazards could only be used if they are derogated. <p>Specific groups of substances would be derogated in order to permit the continued use of essential textile chemicals. These derogations would be subject to specific conditions.</p> <p>The proposals for new criteria 10, 11 and 12 were presented for discussion at the second AHWG for the revision of the textile product group criteria on the 26th-27th September 2012. Feedback has now been invited from stakeholders with a deadline of <u>24th October 2012</u>.</p>	

Criteria 10: Hazardous substances and mixtures

Summary of the criterion proposal

In accordance with Article 6(6) of Regulation (EC) No 66/2010 on the EU Ecolabel, the criteria would require that the product or any component shall not contain substances that are:

- Restricted or authorised by reference to them in Article 57 of Regulation (EC) No 1907/2006 and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Appear on ECHA's Candidate List having been identified as Substances of Very High Concern (SVHC) according to the procedure described in Article 59(1) of Regulation (EC) No 1907/2006.
- Classified as carcinogenic, mutagenic or toxic for reproduction (CMR), toxic and hazardous to the environment in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EC which are identified in the form of Hazard Statements

No derogation shall be given concerning substances that meet the criteria of Article 57 of Regulation (EC) No 1907/2006 and that are identified according to the procedure described in Article 59(1) of that Regulation, present in mixtures, in an article or in any homogeneous part of a complex article in concentrations higher than 0,1 % (weight by weight).

The criteria will be interpreted by Criteria 11 and 12, with 11 focussing on the first two points (which relate to REACH Article 57) and 12 focussing on the last point (which relates to CLP classifications).

The challenge of implementation

The criterion relates to the final ecolabelled product, which could be a fibre, a textile fabric or a final textile/garment. Given the broad range of chemical substances and formulations used by the textile industry the implication of this restriction could be significant. The criteria raises the following specific questions:

- Which substances may remain in the final product, either as residues or as functional components?
- What proportion of substances currently used by industry would be restricted?
- Would it leave a workable range of substances for manufacturers to choose from e.g. dyes, auxiliaries, finishes?
- Which exposure paths are more relevant along the supply chain and during the use phase?

Feedback from stakeholders together with follow-up research carried out by JRC-IPTS suggests that whilst industry is familiar with REACH and the SVHC Candidate List, the long list of hazard statements would be too restrictive. The Technical Report also identified that substances used in the dyeing, printing and finishing stages are of most significance to the final product.

The proposed approach

Given the need find a workable solution that balances the legal requirements of the Articles 6(6) and 6(7) with the need to still support textile chemistry the following overall approach is therefore proposed:

- Restricted Substance List (RSL): Existing substance restrictions contained within the Ecolabel criteria (many of which are restricted by REACH) together with Candidate List SVHC's would be compiled into an RSL (*see Criterion 11: Restricted Substance List*).
- Categorisation of hazard statements: Substances used in the dyeing, printing or finishing process which may be present on the final product shall be subject to restrictions based on their classification according to the CLP guidance. Differentiation will however be made between different categories of hazard. (*see Criterion 12: Substitution of hazardous substances used in dyeing, printing and finishing*).
- Derogation of substance groups: Derogations should be introduced that reflect the continued need for certain groups of substances. However, these should be subject to certain conditions that would serve to minimise the potential exposure of consumers, workers and the environment . (*see Criterion 12: Substitution of hazardous substances used in dyeing, printing and finishing*).
- Due diligence and verification: Verification of compliance should be based on a combination of testing of the final product (Criteria 11) and scientific evidence of classification (Criteria 12):
 - Final product testing: The nature of the textile supply chain means that it is difficult to fully control the final product. Self-declaration may not provide sufficient assurance and so final products may need to be tested to ensure compliance (*see Criterion 11: Restricted Substance List*).
 - Evidencing classification/non-classification: Because of the wide range of substances that may be present on the final product, and potential information gaps in knowing their classifications (or not), the burden of proof would be on the applicant .

An overview of the approach is presented in Figure 1 below, which illustrates how Criteria 11 and 12 would restrict or derogate different groups of substances.

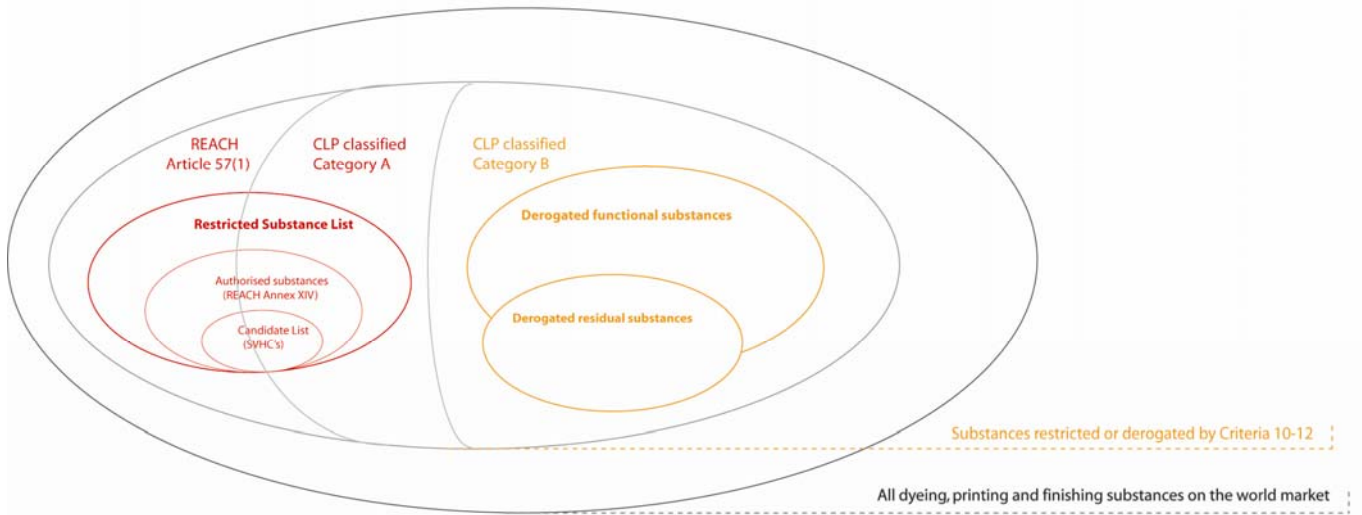


Figure 1: Schematic of substances restricted or derogated by Criteria 10-12

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Criteria 11: Restricted Substance List (RSL)

Summary of the criterion proposal

Final products shall not contain substances listed in the Restricted Substance List (RSL) at or above specified concentrations. The RSL contains restrictions that relate to the following broad groups of substances and processes:

- Biocides
 - Biocidal finishes
 - Treatments used in transportation/storage
- Auxiliaries
- Dyes
 - Azo, CMR, sensitising, chrome mordant and metal complex dyes,
 - Dye and pigment impurities
- Prints
 - Paste VOC content
 - Plastics
- Finishes
 - Easy-care
 - Anti-felting
 - Water repellents
 - Flame retardants
 - Coatings, laminates and membranes
- Accessories

The RSL should be communicated to suppliers and agents at the dyeing, printing, finishing and the cut/make/trim stages. Verification is proposed as being based on selective laboratory testing of the final product.

Background to the proposal

Restricted Substance Lists now appear to be a common format used by industry to communicate substance restrictions to their suppliers. The proposal seeks to reflect this practice. The Ecolabel RSL is compiled from:

- Substances listed in Article 57 and supporting Annexes of the REACH Regulation
- The ECHA Candidate list for Substances of Very High Concern (as of September 2012);

The existing Ecolabel criteria were also screened in order to identify all existing substance restrictions, which are summarised in Table 1.

These restrictions were then compiled into a draft EU Restricted Substance List (RSL). The RSL can be found in Annex 3 of the draft Technical Report. It is proposed that the Ecolabel criteria listed in Table 1 would then be deleted as their content will have been transferred to the RSL.

Verification is proposed to be based on laboratory testing of the final product. It is recognised that the burden of testing would need to be minimised. A number of options are therefore proposed for discussion (see box below).

Options for minimising the final product testing burden

1. Testing could be limited based on a screening of the products characteristics e.g. specific colours, tones or finishes, childrens clothing, plastic accessories;
2. Testing could be carried out randomly or as described in Point 1 across all EU licenseholders;
3. In-house testing of intermediate products by manufacturers or suppliers could be accepted;
4. Equivalent testing carried out for other labels could be accepted (e.g. Oeko-Tex 100) ;
5. Mutual recognition of manufacturers RSL's and independent labels (e.g. Oeko-Tex 100 or GOTS) without the need to examine testing results could be accepted as complying;

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Criteria 12: Substitution of hazardous substances in dyeing, printing and finishing processes

Summary of criterion proposal

Substances used in dyeing, printing and finishing processes which may be present on the final product and which meet the criteria for classification with the listed hazard statements should be substituted in Ecolabelled products.

It is proposed that the generic concentration limits stipulated for each hazard statement are used. If substances are present on the final product above these levels then substances would be restricted. Where specific thresholds are listed in Annex 1 of the CLP Regulation (EC) No 790/2009 these would take precedence.

For the purpose of this criterion the hazard statement listing contained within Criterion 10 has been split into categories A and B, reflecting the grading of hazards in the CLP Guidance:

- Category A hazards would be completely restricted;
- Category B hazards would be derogated for certain groups of substances and under certain conditions, which are set out in the criteria proposal, and which may include a sunset date for substitution.

Derogation of specific Category B hazard statements is proposed for 'functional substances' – dyes, optical brighteners, softeners, easy care finishes, flame retardants, water and stain repellents, and membranes and laminates – and 'residual substances'. Specific derogation conditions must also be met.

Background to the proposals

Closer examination of the hazard statement listing in the standard legal text, together with feedback from stakeholders, suggested that differentiation should be made between the different categories of hazard and the nature of different hazards, which may not always relate to exposure paths from the final product e.g. the handling of dyes in powder form.

Our overall approach therefore seeks to make this differentiation, and has been developed according to following steps:

Step 1: Differentiation of the hazard statements

A differentiation is proposed into Categories notionally referred to as A and B. This distinction is based upon the different categories of hazards in the CLP Guidance (see Annex 4 of the Technical Report). This approach is also similar to approaches adopted by German industry association TEGEWA and textile labeling scheme GOTS.

Step 2: Screening of the existing Ecolabel criteria

The existing Ecolabel criteria were then screened in order to identify all existing hazard statement restrictions, which are summarised in Table 1. The majority of the hazard statements were found to fall into Category A

Step 3: Identification of substance derogations

Derogation proposals received from stakeholders, together with our own screening of a sample of textile chemicals, suggests that derogations of specific groups of substances would

be required (see also Annex 1 of the Technical Report). Our research highlighted two broad groups of substances that remaining on the final product:

- Functional substances which must be present to impart certain qualities such as colour, softness, easycare etc...
- Residual substances that may remain as residues at varying concentrations depending on how efficiently a product has been dyed, rinsed, cured etc..

Many commonly used substances are classified with Category B substances, for example dyes. Derogations are therefore proposed for hazard statements that are relevant to these these groups of substances.

The proposed derogations are presented in Table 2 below.

Step 4: Development of derogation conditions

As we have already highlighted hazard classifications may relate to specific stages in the life cycle of the product. Derogation conditions have therefore been developed that seek to minimise exposure at different stages, to include:

- BAT measures that minimise exposure of the workforce and/or the environment e.g. handling of dyes in powder form
- BAT measures that minimise the concentration of residues on the final product e.g. optimised dosing of auxilliaries
- The achievement of more durable final product finishes e.g. as defined according to EN or ISO standards
- Statutory need for a final product finish or function e.g. in order to meet regulatory requirements or EN/ISO standards

In Table 1 below we relate the derogated substance groups to these conditions.

A 'sunset date' for Category B residual substances could therefore be justified as a broad derogation would permit a very wide range of substances to be used.

Table 1 Schedule of existing criteria proposed for deletion

Criteria containing specific substance restrictions	Criteria containing hazard statement restrictions
<p>11. Biocidal and biostatic products (together with a clause in the Decision pre-amble)</p> <p>14. All chemicals and chemical preparations</p> <p>15. Detergents, fabric, softeners and complexing agents</p> <p>Dye criteria 17 - 23</p> <p>24. Halogenated carriers for polyester</p> <p>26. Formaldehyde</p> <p>27. Flame retardants</p> <p>28. Anti-felting finishes</p>	<p>10. Auxilliaries and finishing agents for fibres and yarns</p> <p>15. Detergents, fabric softeners and complexing agents</p> <p>22. Dyes that are carcinogenic, mutagenic or toxic to reproduction</p> <p>28. Flame retardants</p> <p>30. Fabric finishes</p> <p>32. Coatings, laminates and membranes</p>

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Table 2: Proposed framework for derogation of substances that may be present on textile products.

Functional substances		
Function group	Derogated classifications	Derogation conditions¹
Dyes	H411, H412, H413, H300-331, H317 and H334	<ul style="list-style-type: none"> • EU BAT measures to be used minimise worker exposure in powder form; • Wastewater shall be treated according to the additional requirements in Criteria 27
Optical brighteners	H411, H412, H413	<ul style="list-style-type: none"> • No specific additional requirements
Softeners	H317, H334	<ul style="list-style-type: none"> • Finish must be durable (see proposed new criteria)
Easy care	Category B	<ul style="list-style-type: none"> • Finish must be durable (see proposed new criteria)
Flame retardants	Category B	<ul style="list-style-type: none"> • Required by fire legislation and/or ISO, EN or Member State standards. • Finish must be durable (see proposed new criteria)
Water and stain repellents	H411, 412, 413	<ul style="list-style-type: none"> • Finish must be durable (see proposed new criteria)
Membranes and laminates	H411, 412, 413	<ul style="list-style-type: none"> • No specific additional requirements
Other residual substances		
All residual substances	Category B	<ul style="list-style-type: none"> • EU BAT measures shall be used to: <ul style="list-style-type: none"> - optimise the dosing and use of chemical ingredients - minimise the exposure of workers during the handling of substances; • Wastewater shall be treated according to the additional requirements in Criteria 27

Notes:

1. A specification for the verification process is planned for these conditions.