

Development of EU Ecolabel Criteria for Absorbent Hygiene Products

2nd Ad-hoc Working Group Meeting Brussels, 24 April 2013

Joint Research Centre, Institute for Prospective Technological Studies





Agenda of the day

1.	Opening and welcome	09:30 - 10:00
	Political objectives of the EU Ecolabel and process description	
2.	Scope definition	10:00 - 10:30
3.	Background information and identification of criteria areas	10:30 - 11:00
	Coffee break	11:00 - 11:15
4.	Discussion on requirements for the fitness for use and quality of the product	11:15 - 12:15
5.	Discussion on requirements for materials – part 1:	12:15 - 13:15
	- Consumption and composition	
	- Fluff pulp	
	Lunch break	13:15 - 14:15
6.	Discussion on requirements for materials – part 2:	14:15 - 15:30
	- Man-made fibres	
	- Cotton	
	- Polymers	
	- Other materials	
7.	Discussion on requirements for excluded or limited substances or mixtures	15:30 - 16:00
	Coffee break	16:00 - 16:15
8.	Discussion on requirements for the minimisation of the production waste	16:15 - 16:30
9.	Discussion on requirements for the disposal of AHP	16:30 - 16:45
10.	Discussion on requirements for the information appearing on the EU Ecolabel	16:45 - 17:00
11.	Discussion on requirements for social aspects	17:00 - 17:15
12.	Any other business and conclusion of the workshop	17:15 - 17:30





The EU Ecolabel

- REGULATION (EC) No 66/2010
- Instrument to promote best 10-20% products in terms of environmental performance
- Voluntary tool





EC approach

- Analysis of product groups with focus on technoeconomic and environmental aspects
- Interaction with stakeholders through AHWG meetings and correspondence
- Development of criteria (subject to Member States voting)
- <u>http://ec.europa.eu/environment/ecolabel/</u>
- <u>http://susproc.jrc.ec.europa.eu/product_bureau/</u>



JRC-IPTS:

- Technical and scientific support to other DGs
- Policy development and application
- EU-27 level





Criteria development process



Today: 2nd AHWG meeting







•Ecolabel stakeholder group

•EUEB/Member States

•Ecolabel Competent Bodies

•Industry/independent research institutions

•NGO groups e.g EEB, BEUC

•EU /international Ecolabels

•GPP stakeholder group

•GPP Advisory Group

•Member State procurers

•Industry/independent research institutions

•NGO groups e.g EEB, BEUC



Overview of the presentation

- Status of the criteria development process
- Scoping
- Background information
- Identification of criteria areas
- Discussion on single criteria





Overview of the presentation

Status of the criteria development process

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Development of EU Ecolabel criteria:

- Scoping
- Analysis of legislation, labels, standards
- Market analysis
- Technical and environmental analysis
- Identification of criteria areas
- Definition of criteria

Background information:

- Preliminary report (v5)
- Technical report (v3)
- Criteria document (v2)

Follow-up with stakeholders





Timeline:

- Jun 2012: 1st AHWG Meeting
- Sep 2012: Meeting with EDANA
- Nov 2012: EUEB meeting
- Mar-2013: EUEB meeting
- Apr 2013: 2nd AHWG Meeting
- Jun 2013: EUEB meeting
- Nov 2013: EUEB meeting





Overview of the presentation

Status of the criteria development process **Scoping**

Background information

Identification of criteria areas

Discussion on single criteria





From Sanitary Products... to AHP

- Preliminary identification of broad basket of products;
- To narrow the focus;
- Observation of labels, legislative constraints, market information;
- Definition of common technical aspects and functionalities.





Scope of the EU Ecolabel for AHPs

Fibres content < 90% by weight and disposable:

- Children's diapers
- Sanitary pads/napkins and panty liners
- Tampons
- Breast pads

NO incontinence products = medical devices (Council Directive 93/42/EEC)





Definition of the product scope

lower

- **1.** What should be awarded the Ecolabel?
 - a) Products with specific design and size? → flexibility to producers
 - b) A product line (same design different sizes) → Ecolabel as usual
 - c) (A combination of products fulfilling a certain function)
- 2. The product group **shall comprise**:
- all kinds of children's diapers
- all kinds of sanitary pads/napkins and panty liners
- all kinds of tampons
- breast pads

a.

b.

tha

С.

3. The product group **shall not comprise** other types of products classified under Council Directive 93/42/EEC (medical devices).





- Overview of the presentation
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- **Identification of criteria areas**
- Discussion on single criteria





Identification of criteria areas

Based on:

- Analysis of legislation, other labels and standards
- Market and technical analyses
- Stakeholders feedback
- Practical aspects

Stage 1.

Identification of criteria areas

Stage 2.

Discussion of proposals

- Potential relevance
- Technical feasibility
- Support

Stage 3.

Definition of final criteria

Joint Research Centre



Market highlights (1)

Production volume:

- About 1.7 millions of tons / 11 billions of Euros in 2011
- Slight increase between 2009 and 2011
- Importance of children's diapers (and incontinence products)

Import/Export:

- 90% produced and consumed within the EU27
- Export is higher than import
- Imported products are cheaper and heavier





Market highlights (2)

Key factors:

- Demographic changes
- Consumer preferences and needs
- Others (e.g. price pressure, retail sector, financing models, labels)

Market trends:

- Product differentiation
- Lighter products





Legislation, labels and standards

- Schemes of interest: Nordic Swan ecolabel, SEMCO and EDANA GPP guidelines
- **Common issues** (e.g. Wood sourcing) aligned with EU Ecolabel and other labels
- **Criteria on hazardous substances** required by Regulation (EC) 66/2010;
- Fitness for use and technical criteria as a topical issue but...
- Some **environmental claims** of interest (e.g. Organic sourcing)





Technical analysis

Focus:

LCA, hazardous substances, materials

Aim:

- 1. Detect environmental hot spots through the life cycle of the products
- 2. Identify improvement options and best alternatives
- 3. Provide support to the definition of environmental criteria





LCA analysis

• LCA review + analysis of four base case scenarios: *children's diaper* (many info available in the literature) *feminine care pad tampon breast pad*

- Goal: identify hot-spots in the lifecycle of **average** AHPs
- Functional unit: A single unit of product, including the packaging
- System boundaries: cradle-to-grave





Base cases

Impact category	Baby Diaper (36g)	Sanitary Pad (8g)	Tampon (2+2.5g)	Breast Pad (4g)
Abiotic Depletion Potential (ADP) [kg Sb-Eq.]	7,0E-08	2,8E-08	9,6E-09	1,2E-08
Acidification Potential (AP) [kg SO ₂ -Eq.]	5,5E-04	1,7E-04	1,0E-04	9,4E-05
Eutrophication Potential (EP) [kg PO ₄ ³ -Eq. ⁻]	1,3E-04	3,9E-05	2,2E-05	2,2E-05
Global Warming Potential (GWP) [kg CO ₂ -Eq.]	1,3E-01	2,9E-02	1,9E-02	1,4E-02
Photochemical Ozone Creation Potential (POCP) [kg Ethene-Eq.]	6,2E-05	1,9E-05	5,5E-06	8,6E-06
Primary Energy Demand (renewable and non- renewable) [MJ]	4,3E+00	1,2E+00	5,2E-01	6,3E-01
Primary Energy Demand (renewable) [MJ]	1,5E+00	6,1E-01	1,6E-01	3,6E-01
Primary Energy Demand (non-renewable) [MJ]	2,8E+00	6,0E-01	3,7E-01	2,7E-01



Weight dependence 23



Results for Children's diapers

Impact category	Materials	Transport ation	Product ion	Packag ing	Use phase	End-of- life	Total
Abiotic Depletion Potential (ADP) [kg Sb-Eq.]	95%	0%	1%	2%	0%	1%	7,0E-08
Acidification Potential (AP) [kg SO ₂ -Eq.]	85%	2%	5%	3%	2%	2%	5,5E-04
Eutrophication Potential (EP) [kg PO ₄ ³ -Eq. ⁻]	66%	2%	2%	2%	3%	25%	1,3E-04
Global Warming Potential (GWP) [kg CO ₂ -Eq.]	62%	1%	6%	0%	2%	29%	1,3E-01
Photochemical Ozone Creation Potential (POCP) [kg Ethene- Eq.]	92%	-9%	8%	4%	-9%	13%	6,2E-05
Primary Energy Demand (renewable and non-renewable) [MJ]	92%	1%	3%	3%	1%	0%	4,3E+00
Primary Energy Demand (renewable) [MJ]	97%	0%	1%	2%	0%	0%	1,5E+00
Primary Energy Demand (non- renewable) [MJ]	90%	1%	5%	3%	1%	0%	2,8E+00

Qualitatively similar results for others



Effects due to product weight decrease

Material	2004	2011	Difference
Fluff pulp	43%	36.6%	-6.4%
Superabsorber (SAP)	27%	30.7%	+3.7%
Polyethylene, low density (LDPE)	7%	6.2%	-0.8%
Polypropylene (PP)	15%	16.0%	+1%
Adhesive	3%	2.8%	-0.2%
Elastics	1%	0.4%	-0.6%
Other materials	4%	7.3%	+3.3%
Total product weight [g]	42	36	-6 (14%)





Effects due to product weight decrease

	Material 2004 2011	Difference		
F	Impact category	Baby diaper 2004	Baby diaper 2011	Difference (%) (2004=100%)
, r	Abiotic Depletion Potential (ADP) [kg Sb-Eq.]	6,8E-08	7,0E-08	4%
F	Acidification Potential (AP) [kg SO ₂ -Eq.]	6,8E-04	5,5E-04	-20%
1	Eutrophication Potential (EP) [kg PO ₄ ³ -Eq. ⁻]	1,6E-04	1,3E-04	-20%
E	Global Warming Potential (GWP) [kg CO ₂ -Eq.]	1,5E-01	1,3E-01	-11%
-	Photochemical Ozone Creation Potential (POCP) [kg Ethene-Eq.]	7,4E-05	6,2E-05	-17%
	Primary Energy Demand (renewable and non- renewable) [MJ]	5,2E+00	4,3E+00	-17%
	Primary Energy Demand (renewable) [MJ]	2,1E+00	1,5E+00	-26%
	Primary Energy Demand (non-renewable) [MJ]	3,1E+00	2,8E+00	-10%





Main outcomes

- Raw materials as the main contributors (53-98%)
- End-of-Life can even be important for EP (16%-25%), GWP (27%-33%) and POCP (9%-19%)
- Lower contribution from production, packaging and transport
- Dependence of environmental performance with weight
- Agreement with other studies

Materials	Children's diaper	Feminine care pad	Tampon with applicator	Breast pad
Fluff pulp	x	X		X
SAP	X			X
PP nonwoven	x			
PET film		X		
LDPE film	x	X		
Cotton/Viscose			X	
Applicator			X	
Release paper		X		X
Adhesives		X		



Hazardous materials (EC/66/2010)

- **NO hazardous substances or preparations** according to the CLP Regulation (specific/generic concentrations)
- **NO SVHCs** fulfil the criteria described in Article 57 of the REACH Regulation
- **Derogations possible only if** technically feasible and alternative material does not decrease the environmental performance significantly
- **No derogation** possible for substances meeting the criteria of Article 57 of REACH Regulation in concentrations exceeding 0.1% by weight
- Manufacturers to provide evidence





Possible areas of focus (1)

Substance/Material	Substances of preliminary investigation	
Biocides	No biocides apparently used	
Cellulose (Fluff pulp) and viscose	Debonding agents, softeners, bleaching process (chlorine), dioxine, pesticides	
Cotton	Bleaching process (chlorine), dioxine, pesticides	
Elastics	Solvents (e.g. Dimethylacetamide)	
Glues and adhesives	Solvents, chemicals such as diisobutyl phthalate (DIBP), colophony resin, formaldehyde	
Inks, pigments and dyestuff	Solvents, heavy metals or toxic colouring agents such as azo colors	
Lotions and skin care preparations	Mainly petrolatum and stearyl alcohol. Sometimes other minor ingredients are added (e.g. aloe). However, industry reported that safety tests are performed.	
Nanomaterials	Potential presence of trace materials or nano-structures (e.g. micelles)	
Odour control substances	Various substances can control odours (e.g. SAP, perfumes, fragrances). Perfumes and fragrances must comply with IFRA (International Fragance Association) 2009 guidelines. An opinion on fragrance allergens in cosmetic products published by SCCS (Scientific Committee on Consumer Safety) in 2012.	





Possible areas of focus (2)

Substance/Material	Substances of preliminary investigation	
Plastic materials	Additives. Flame retardants, PVC, phthalates are not used.	
Siliconised paper	Siloxanes, fulfilling criteria for classifications according to the EC Regulation 1272/2008 (e.g. octamethyl cyclotetrasiloxane or decamethyl cyclopentasiloxane)	
Superabsorbent polymer	Residual monomers of acrylic acid; other water-soluble extracts	
Others	Impurities of many substances (even SVHC)	





Criteria

Criteria area	Proposed criteria	
Materials and design	1. Use of materials	
	2. Fluff pulp	
	3. Man-made fibres	
	4. Cotton	
	5. Polymers	
	6. Other materials	
Chemicals	7. Excluded or limited substances or mixtures	
Manufacture	8. Minimisation of the production waste	
End-of-life	9. Disposal of AHP	
Fitness for Use	10. Fitness for use and quality of the product	
Other issues	 11. Information appearing on the EU Ecolabel 12. Social aspects 	





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Criterion 10: Fitness for use and quality of the product

- Technical performance/Quality = key aspect for market acceptance and environmental sustainability
- NO harmonised standards, NO performance thresholds, Which areas?
- Screening of parameters to describe the performance of AHPs and available testing procedures...
- Fusion between NS approach and adaptation of EDANA guidelines for testing baby diapers



The efficiency/quality of the product must be satisfactory and must at the least match that of equivalent products on the market.

Characteristics and parameters of interest:

Characteristic and parameter		Scope	Tests	Performance threshold
User tests	Overall performance	All	User trial	90% of the consumers testing the product shall rate themselves as "satisfied" (rating 4) or "very satisfied" (rating 5) in a rating scale from 1 to 5.
	Leakage protection	All	User trial	Leakage results in less than 10% of all diaper changes.
	Skin dryness and compatibility	All	User trial	90% of the consumers testing the product shall rate themselves as "satisfied" (rating 4) or "very satisfied" (rating 5) in a rating scale from 1 to 5.
	Fit and comfort	All	User trial	90% of the consumers testing the product shall rate themselves as "satisfied" (rating 4) or "very satisfied" (rating 5) in a rating scale from 1 to 5.
Safety tests	Chemical safety	All	Tests in accordance with the Oeko-Tex Standard 100	not available
	Microbiological safety	All	Tests in accordance with ISO 11737-1	to be determined
Technical tests	Absorption	All	Absorption rate Absorption before leakage	not available
	Skin dryness and	All	Skin wetting (rewet)	not available
	compatibility		Dermatological testing	
	Evaluation of the closure/fastening system	All	Tensile strength for tapes and elastics	not available



Assessment and verification:

- 1. A test report to be provided (test methods, results and data)
- 2. As much as possible product-relevant, reproducible and rigorous methods.
- 3. Internal or external labs certified to implement quality management systems
- 4. Sampling, test design, panel recruitment and the analysis of results compliant with ASTM E1958-07e1 (not needed?)
- 5. Tests on the main product designs and/or the most common size. (not needed?)
- 6. Guarantee comparable results. (not needed?)
- 7. Not to blind products or repack them in neutral packaging (not needed?)
- 8. Information must be made available to all relevant stakeholders and understandable to the consumers. (not needed?)
- 9. Include criteria used to select the products tested, the representativeness and the sampling of the products, the characteristics selected and if applicable, the reasons why some were not included, the test methods used and their limitations if any **(not needed?)**
- 10.External factors that may have an impact on the perceived performance of the products should be communicated **(not needed?)**
- 11. Clear guidelines on the use of test results must be provided (not needed?)





Additional requirements for user tests:

- 1. Consumer surveys according to standard statistical practices, i.e. ASTM E1958-07e1
- 2. Min number of required answers in a user panel = 30
- 3. Results to be statistically evaluated
- 4. Each product should be assessed on the basis of a questionnaire. The test is to last at least 72 hours per test, a full week when possible
- 5. The ratio of male to female individuals should be 1:1 (not applicable to products designed specifically for one gender)
- 6. All participants should be current users of the specific type/size of AHP being tested
- 7. A mixture of participants representing proportionally different groups of consumers available on the market should take part in the study
- 8. The product should be used under direct supervision of the respondents, in the same way and conditions as the product they normally use.
- 9. If the test is conducted in a different country than the target market, the name of the country should be clearly stated
- 10. individuals with a chronic skin condition should not participate in the test. In cases where individuals become ill during the course of the user trial, this is to be indicated on the questionnaire and the results are not to be taken into consideration for the assessment.


Additional requirements for safety tests:

- 1. Chemical tests shall be carried out in accordance with the Oeko-Tex Standard 100.
- The determination of the microbiological quality shall be carried out on the original product in accordance with ISO 11737-1 "Sterilization of medical devices - Microbiological methods - Part 1: Determination of a population of microorganisms on products".
- 3. As applicable, other guidelines, recommendations, relevant legal decisions, scientific publications and other regulations and standards may also be taken into consideration.

Additional requirements for technical tests:

- 1. For diapers tests can be conducted with saline solution (0.9% NaCl analytical grade in de-ionized water)
- 2. A minimum of 5 samples should be tested, and results should be reported with the average and standard deviation from those 5 samples.





Area of discussion:

- General approach seems acceptable, some modifications needed.
- Improvable at the next criteria revision
- Reference = no performance of excellence, satisfactions of minimal targets

Shape the final version of this criterion, in particular:

- which performance characteristics are worthy of consideration for which product?
- which assessment and verification procedure to follow?
- for which characteristics it is possible to set performance thresholds and how?





Materials and design

- 62%-97% of environmental impacts from materials
- Impacts = f (weight; single materials)
- Full LCA not implementable
- Simplifications needed when setting criteria
- Decoupling the problem =
 - 1. to decrease the impact of the whole product
 - 2. to source and produce more eco-friendly materials
- GWP/kg of AHP (kg CO_{2eq}) <u>or</u> minimal% of any renewable material... not consistent alone



Example:

Product A

GWP per unit of mass = 5 g CO_2 / g product Weight = 36 g

Product B

GWP per unit of mass = 4.5 g CO_2 / g product Weight = 50 g

B is better than A?

GWP for the whole product A) 5 x 36 = 180 g CO2 / g product B) 4.5 x 50 = 225 g CO2 / g product





Materials and design

- Use of materials
- Fluff pulp
- Man-made fibres
- Cotton
- Polymers
- Other materials





Criterion 1: Use of materials

- Op. 1) Weight thresholds*
- Op. 2) GWP thresholds for the <u>whole</u> product*
- Op. 3) No criteria

(*) Information on products categorization, weight and composition needed!





Option 1: Setting maximal weight thresholds

Reducing weight → reducing environmental impacts

Max weight threshold for some types of AHPs?

Example: Baby diapers

- Taped diapers;
- Pull-on diapers;
- Swimming diapers;
- Night diapers.



	Size*								
IAPED DIAPERS	0	1	2	3	4	4+	5	5+	6
DODOT ES		2-5	3-6	4-10	9-15	11-16	13-18	15-20	17-28
DODOT PT		2-5		4-10	9-15		13-18		
HAPPY			3-6	4-10	8-15		12-25		>16
HUGGIES			3-6						
KRUIDVAT	<2,5	2-5	3-6	4-9	7-18	9-20	11-25		15-30
MOLTEX			3-6	4-9	7-18		11-25		
NATY		2-5	3-6	4-9	7-18		11-25		
PAMPERS BE		2-5	3-6	4-9/4-7	7-18	9-20	11-25	13-27	
PAMPERS ES		4- 6	5-8	7-13	10-17		>12		>16
PAMPERS IT		2-5	3-6	4-9	7-18		11-25	13-27	>16 / 15-30
PAMPERS UK	1-2.5	2-5	3-6	4-9	7-18	9-20	11-25	13-27	>16
TESCO	1-2.5	2-5	3-6	4-9	7-18	9-20	11-25	14-30	14-30
* For each size the corresponding children weight range is reported in kg (when no unit of measure is provided)									

No harmonised classification... but similar

	Size*						
PULL ON DIAPERS	3	4	4+	5	6	7	8
CHEEKY BOT		7-18		9-20	11-25		
HAPPY		9-15		11-18	17-28		
KRUIDVAT			10-16	13-20	16-26		
NATY		7-18		12-18	>16		
PAMPERS BE		8-15		12-18	>16		
PAMPERS IT		8-15		12-18	>16		
PAMPERS UK		8-15		12-18	>16	17-29	29-39
DODOT ES	4-10	9-15		13-18			
TESCO		7-18		12-18	>16		
* For each size the corresponding children weight range is reported in kg (when no							

unit of measure is provided)

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- Difficult to get information about the weight of products.
- Estimation made for Taped diapers:
- Hp.1) 70% of products on the market weight between 30-38 grams and uniformly distributed in 8 classes of weight;
- Hp. 2) For all classes, 20% of the products are 20% heavier;
- Hp.3) For all classes, 10% of the products are 60% heavier.





Distribution of product weights



Repeated for other types of AHPs but info gap to be filled





Product		Weight threshold
Baby diapers	Taped	(A x + B)g, with x average class weight in kg ?
	Pull on	?
	Night	?
	Swim	?
Feminine care pads	Panty liners for blood collection and handling	?
	Panty liners for blood and urine collection and handling	?
	Pads categorization based on • Absorbency, • presence/absence of wings?	?
Tampons	Tampons categorization based on • 6 classes of absorbency • presence/absence of the applicator?	?
Breast pads	No categorization needed?	?

Assessment and verification: sample of the product + selfdeclaration



Option 2: Setting environmental thresholds based on the GWP of the product

- Rough calculation of impacts due to materials
- Focus on GWP to simplify (kg CO_{2eq})
- Distribution of GWP vs. average weight of size classes
- Regression line for screening product eligible for the EU Ecolabel
- Information on classification, weight and composition of single products as starting point!!!





Option 3: No criteria on the use of materials

Previous options hindering innovation???

- A criterion will not be proposed if:
- identification of functionally equivalent types of products is too complicated
- data are missing for ALL the products
- Is this a better option? Maybe, but...

not handling the key factor influencing the environmental impacts of AHPs.

- Op. 1: Setting max. weight thresholds;
- Op. 2: Setting env. thresholds based on the GWP of the product;
- Op. 3: No criteria on the use of materials.

Which options? Why and how? For which products?





Criterion 2: Fluff pulp

- 2.1) Sourcing (revision of textiles)
- 2.2) Bleaching (copying and graphic paper)
- 2.3) Visual whitening and colouring agents (NS)
- 2.4) Emission of COD and phosphorous (P) to water and sulphur (S) compounds and NOx to air from production (copying and graphic paper)
- 2.5) Emissions of CO2 from production (copying and graphic paper)
- 2.6) Energy use during the production (copying and graphic paper)
- 2.7) Industrial best practices





2.1) Sourcing

- X% pulp fibres (100?) manufactured from wood grown according to the principles of Sustainable Forestry Management (according to UN FAO).
- The remaining balance of pulp fibres from legal forestry and plantations.

Assessment and verification:

- independently certified chain of custody certificates from pulp supplier(s)
- FSC, PEFC (and SFI?) shall be accepted for SFM
- Due diligence processes as specified in Regulation (EC)19/2010
- Valid FLEGT (Forest Law Enforcement, Governance and Trade) or CITES (Convention on International Trade in Endangered Species) licenses or third party certification for legal sourcing.





2.2) Bleaching

(a) The pulp used in the product shall not be bleached with the use chlorine gas.

(b) The AOX emissions from the production of each kind of pulp shall not exceed 0.170 kg/ADT (to be decreased to 0.150?).

Assessment and verification:

- (a) self-declaration from the supplier
- (b) test reports using AOX ISO 9562 or **EPA 1650**
- AOX to be measured only where chlorine compounds are used for the bleaching
- Not for non-integrated pulp production
- Frequency: weekly (or monthly?) basis for 1 year of production, from representative composite samples (24 hours composite).
- For **new or re-built plants or a changes of process** at the production plant, on a weekly basis for a total of 8 consecutive weeks following steady running





2.3) Visual whitening and colouring agents

No intentional addition of visual whitening and colouring agents (incl. fluorescent whitening agents)

Assessment and verification:

Self-declaration from the supplier





2.4) Emission of COD and phosphorous (P) to water and sulphur (S) compounds and NOx to air from production

• Points (P_{COD} , P_{S} , P_{NOx} , P_{P}) = Emission / reference value

- Weighted average in case of different types of pulp (no mix use?)
- P_{COD}, P_S, P_{NOx}, P_P < 1.5
- $P_{COD} + P_{S} + P_{NOx} + P_{P} < 4.0$

Pulp grada	Reference emissions (kg/ADT)					
Pulp glade	COD _{ref}	S _{ref}	NOx _{refe}	P _{ref}		
Bleached chemical pulp (others than sulphite)	18.0	0.6	1.6	0.045*		
Bleached chemical pulp (sulphite)	25.0	0.6	1.6	0.045		
СТМР	15.0	0.2	0.3	0.005		
TMP/groundwood pulp (NO?)	3.0	0.2	0.3	0.01		
* set up to 0.05 where demonstrated that higher level of P emissions is due to P naturally						

contained in wood fibres and water (wording to be clarified? Refer to net emissions?)



All emissions of S and NOx (including steam generated outside the production site, recovery boilers, lime kilns, steam boilers, destructor furnaces for strong smelling gases, diffuse emissions)

No emissions related to the production of electricity

In case of co-generation, proportion of S and NOx emissions from electricity generation to be discounted (exergy allocation):

- 2 × (MWh(electricity)) / [2 × MWh(electricity) + MWh(heat)]
- Electricity produced at the co-generation plant

• net heat value input, i.e. the heat that is produced at the co-generation plant and actually delivered to the pulp production process (wording to be clarified? Refer to all heat production and then discount sold heat?)





Assessment and verification:

Measurement / Calculation (add continuous methods for NOx and S?)

- COD: ISO 6060, EPA SM 5220D or HACH 8000;
- NOx: ISO 11564 or EPA 7E;
- S(oxid.): EPA 8;
- S(red.): EPA 8 or EPA 16A;
- S content in oil: ISO 8754 or EPA 8;
- S content in coal: ISO 351 or EPA 8;
- P: ISO 6878, SM4500, APAT IRSA CNR 4110 or Dr Lange LCK 349.

Monitoring

- COD and P: weekly basis for 1 year on unfiltered and unsettled samples
- S and NOx yearly basis for 1 year
- New or re-built plant or a change of process → weekly basis for 8 consecutive weeks





2.5) Emissions of CO₂ from production

CO₂ emissions from non-renewable energy sources < 1100 kg per tonne of pulp...

- 150-200 kg/ADT for chemical pulp?
- 900-1000 kg/ADT for CTMP pulp?

Fuel	CO ₂ fossil emissions (g CO _{2fossil} /MJ)
Coal	95
Crude oil	73
Fuel oil 1	74
Fuel oil 2-5	77
LPG	69
Natural Gas	56
Grid Electricity	400

Reference values:

Research Centre



Assessment and verification:

Sources of non-renewable fuels + calculations

Electricity included

Measurement period:

• yearly basis for 1 year

• New or re-built plant or a change of process \rightarrow calculation for 8 consecutive weeks or for the whole campaign + after 12 months?

Documentation on the real use of renewable fuels, if any





2.6) Energy use during the production

Pulp grade	Fuel (kWh/ADT)	Electricity (kWh/ADT)
Chemical pulp	4000*	800
Mechanical pulp	900**	1900
СТМР	1000	2000 (?)

*: For air dry market pulp (admp) containing at least 90% dry matter, this value may be upgraded increased by 25% for the drying energy ** This value is only applicable for admp

Electricity

- Consumption = Purchased (+ Internally produced sold)
- P_E < 1.5
- Weighted average in case of different types of pulp





Fuel (heat)

 Consumption = Purchased (+ Internally produced - sold - <u>1.25 (or 1.4-1.5?) ×</u> internally produced electricity)

- P_F < 1.5
- Weighted average in case of different types of pulp
- For mechanical pulp only if air dried and containing at least 90% dry matter
- Fuel used to produce the sold heat added to the term 'sold fuel' (to be deleted?)

Or maybe better to discuss in terms of:

- CO₂ (indicator of fossil fuel cons.) + use of waste for energy or materials
- Primary Energy demand (= 1 only figure!)



Assessment and verification:

Calculations of all energy inputs (heat/fuels and electricity)

including the energy used in the de-inking of waste papers for the production of recycled paper (to be deleted)

Not included: transport of raw materials, conversion (?) and packaging

Heat (to be clarified):

- all purchased fuels
- heat energy recovered by incinerating liquors and wastes (80%)
- heat recovered from the internal generation of electricity (80%)
- steam from electricity (80%)

Electricity: net input without inclusion of wastewater treatment

In case of integrated mills (not relevant?)...





2.7) Industrial best practices

Requirements on waste management:

• **Implementing an integrated waste management plan** to optimize prevention, reuse, recycling, recovery, and final disposal of waste according to waste hierarchy.

• **Separating different waste fractions** to allow reuse or recirculation of the single fractions.

• Recycling fibres, wherever possible

Assessment and verification:

Self-declaration





Area of discussion:

- 2.1) Sourcing
- Amount of SFM-certified pulp
- SFI?

2.2) Bleaching:

- Limit value for AOX emissions to be decreased?
- Or for OX emissions (as in on man-made cellulosic fibres)?
- Assessment and verification procedure: test methods, definition of "new or rebuilt production plant", frequency of measurements, ...





2.4) Emission of COD and phosphorous (P) to water and sulphur (S) compounds and NOx to air from production

- Assessment and verification: test methods, definition of "new or re-built production plant", frequency of measurements, ...
- Clarifying:
- a) increased limit value for P emissions;
- b) equation used to calculate the proportion of the emissions resulting from heat/electricity

2.5) Emissions of CO₂ from production

Limit values

• Assessment and verification: definition of "new or re-built production plant", frequency of measurements, ...





2.6) Energy use during the production

- Clarify equation for fuel consumption
- Factor used to deduct the internally produced electricity from the fuel consumption: from 1.25 to 1.4-1.5?
- Assessment and verification: some modifications needed
- Different approach to use?





Criterion 3: Man-made cellulose fibres (including viscose, modal, lyocell, cupro, triacetate)

- **3.1) Sourcing (revision of textiles)**
- 3.2) Bleaching (revision of textiles)
- 3.3) Visual whitening and colouring agents (NS)
- 3.4) Production of fibres (revision of textiles)
- 3.5) Industrial best practices





3.1) Sourcing

(a) 25% pulp fibres from SFM, 75% from legal source.

(b) Dissolving pulp produced from cotton linters \rightarrow as for cotton (sourcing and traceability) but different thresholds (25% for IPM and 10% for organic).

Assessment and verification:

(a) As for pulp...and SFI?

(b) As for cotton.





3.2) Bleaching

- (a) No use of chlorine gas.
- (b) Halogenated compounds (OX) in the fibres < 0.150 kg/ADT

Assessment and verification:

- (a) declaration from the supplier
- (b) Test report following ISO 11480.1997 (controlled combustion and microcoulometry)





3.3) Visual whitening and colouring agents

No intentional addition of visual whitening and colouring agents (incl. fluorescent whitening agents)

Assessment and verification:

declaration from the supplier





3.4) Production of fibres

(a) Limits for viscose and modal fibres production (see table below)

(b) Cupro fibres: annual average of copper in the effluent water < 0.10 ppm.

(c) At least 50% of pulp used from dissolving pulp mills that recover value from their spent process liquor (bio-refinery approach)

Fibre type	Sulphur emissions to air Limit value (g/kg)	Zinc emissions to water Limit value (g/kg)
Staple fibre	30	0.30
Filament fibre - Batch washing - Integrated washing	60 170	0.16 0.16
Note: Limit values	expressed as annual average	9

Assessment and verification:

(a), (b) documentation and/or test reports showing compliance

(c) list of pulp suppliers, proportion and supporting documentation and evidence





3.5) Industrial best practices

Environmental area	Measures
Water consumption and wastewater emissions	 Removal of Na₂SO₄ from wastewater (spinning baths, in which the viscose solution is pressed through spinnerets) for coagulation of the fibres Reduction of Zinc from wastewaters by alkaline precipitation followed by sulphide precipitation. Use of anaerobic sulphate reduction techniques for sensitive waterbodies. If further desulphurization is necessary, anaerobic reduction to H₂S must be carried out. Use of separate effluent collection systems for Contaminated process effluent water Potentially contaminated water from leaks and other sources, including cooling water and surface runoff from process plant areas, etc. Uncontaminated water
Waste management	 Use of fluidized bed incinerators to burn non-hazardous wastes with subsequent heat and energy recovery Recycling of fibres, wherever possible
Air emissions	 Condensation of exhaust air from spinning streets to recover CS₂ and backcycling into the process. (different technologies available). Operation of spinning frames in houses in order to minimise CS₂ emissions, (spinning frames are the sources of CS₂ emissions). Housings have to be equipped with leak proof sliding windows and have suction systems inside where excess CS₂ is purged to a recovery facility. Application of exhaust air desulphurization processes based on catalytic oxidation with H₂SO₄ production.



Area of discussion:

3.1) Sourcing

Should the list of accepted certification schemes include even SFI?

3.5) Industrial best practices

Which measures should be included in the final criterion proposal?




Criterion 4: Cotton and other natural cellulosic seed fibres

- 4.1) Sourcing (revision of textiles)
- 4.2) Traceability (revision of textiles)
- 4.3) Bleaching (revision of textiles)
- 4.4) Visual whitening and colouring agents (NS)
- 4.5) Industrial best practices





4.1) Sourcing

Op.1 OR Op.2 to be chosen by producer (or only one proposed?)

Option 1: IPM

50% cotton **(to increase this threshold?)** grown with Integrated Pest Management (IPM).

Content of these substances < 0.5ppm: Alachlor, aldicarb, aldrin, campheclor (toxaphene), captafol, chlordane, 2,4,5-T, chlordimeform, chlorobenzilate, cypermethrin, DDT, dieldrin, dinoseb and its salts, endosulfan, endrin, glyphosulfate, heptachlor, hexachlorobenzene, hexachlorocyclohexane (total isomers), methamidophos, methyl-o-dematon, methylparathion, monocrotophos, parathion, phosphamidon, pentachlorophenol, thiofanex, triafanex, triazophos.





Assessment and verification

- Accepted programmes/schemes: UN FAO IPM programme, USDA IPM programme, Better Cotton Initiative (BCI), Cotton Made in Africa, the Australian Better Management Programme (BMP), Fair Trade.
- Tests on 5% raw cotton using: US EPA 8081 A (organo-chlorine pesticides, with ultrasonic or Soxhlet extraction and apolar solvents (isooctane or hexane)), 8151 A (chlorinated herbicides, using methanol), 8141 A (organophosphorus compounds), 8270 C (semi-volatile organic compounds)
- Declarations of non-use accepted where they are verified by annual site visits.





Option 2: Organic

- 25% (to increase this threshold to 90%?) of organic cotton (Regulation (EC) No 834/2007 or US National Organic Programme).
- organically grown cotton and transitional organic cotton.
- No pesticide testing for remaining part (or yes?)

Assessment and verification

- Organic content certified by an independent organisation
- Verification on an annual basis for a proportion of the cotton purchased or of the blending of cotton at the spinning stage





4.2) Traceability

It shall be possible to trace all the IPM or organic cotton.

Assessment and verification

- Transaction records and/or invoices
- ...until greige fabric production before dyeing, printing and finishing (not necessary)
- Documentary evidence (e.g. GOTS, Fair Trade, OE Blended and OE 100 standards)





4.3) Bleaching

Cotton shall not be bleached with the use of chlorine gas.

Assessment and verification

The applicant should provide a declaration from the supplier that chlorine gas is not used.





4.4) Visual whitening and colouring agents

No intentional addition of visual whitening and colouring agents (incl. fluorescent whitening agents)

(delete reference to the pulp)

Assessment and verification declaration from the supplier





4.5) Industrial best practices

Environmental area		Measures
Water consumption	1.	Implementing water-saving solutions.
and	2.	Implementing a monitoring plan in order to avoid/ minimize any
wastewater emissions		kind of surplus of applied chemicals and auxiliaries and to minimize
		consumption of complexing agents in hydrogen peroxide bleaching.
	3.	Implementing multi-step waste water treatment plants to decrease the
		emission of AOX.
Waste management	1.	Implementing an integrated waste management plan to optimize
		prevention, reuse, recycling, recovery, and final disposal of waste
		according to waste hierarchy.
	2.	Separating different waste fractions to allow reuse or recirculation
		of the single fractions.
Air emissions	1.	Selecting auxiliaries and chemicals with a low volatility and low
		smell intensity.
Energy management	1.	Implementing measure to optimize energy efficiency and to
		reduce the consumption of fossil fuels.
	2.	Applying on-site generation of electricity and heat in combined heat and
		power plants (CHP)





Area of discussion:

- 4.1) Sourcing
- Choose between 1 and 2 or propose 1 or 2?
- % thresholds?

4.5) Industrial best practicesWhich measures?





Criterion 5: Polymers

- 5.1) Sourcing (NS)
- 5.2) Heavy metals / organostannic compounds (EDANA's GPP guidelines)
- 5.3) SAP (NS)
- 5.4) Industrial best practices





Criterion 5: Polymers

5.1) Sourcing

An X% by weight of the polymers shall come from renewable feedstock???

- Bio-polymers about 1.5% of total in 2011
- 3-4 times in 2020?
- Impacts depend on feedstock and EoL practice
- LCA as only approach for certifying sustainability
- → Postpone this issue





5.2) Heavy metals / organostannic compounds

Contents of lead, cadmium, mercury, hexavalent chrome and attendant impurities as well as organostannic compounds in plastic materials < 0.1% w/w.

Assessment and verification

declaration from the supplier

Relevant?

In GECA:

- max 11 kg SO2 per ton PE/PP,
- max 12 kg NOx per ton PE/PP,
- no use of organic solvents for PE produced by fibre extrusion,
- no chlorine-based plastics or phthalates (not used apparentely)



5.3) Super Absorbent Polymers

(a) maximum of 400 ppm residual monomers (total of unreacted acrylic acid and cross linkers) ((a) and (b) not relevant?)

(b) maximum 5% (w/w) of water-soluble extracts (i.e. monomers and oligomers of acrylic acid with lower molecular weight than SAP according to ISO 17190 – 10:2001) (inorganic salts not of relevance)

(c) Acryl amide shall not be used (CAS 79-06-1: H301; H312; H332; H315; H319; H317; H361; H340; H350; H372 → Criterion 7)

Assessment and verification:

- (a) SDS specifying full names and CAS numbers and the residual monomers.
 Methods (WSP 210.2 (05), ERT 410.2 (02)/IST 210.2(02), ISO 17190 2:2001) and labs.
- (b) Declaration from the supplier specifying the quantity of water-soluble extracts. Methods (WSP 270.2 (05), ERT 470.2 (02)/IST 270.2(02), ISO 17190 – 10:2001⁾ and labs.

(c) Declaration of non-use





5.4) Industrial best practices

Environmental area		Measures
Water consumption and wastewater emissions	1.	Implementing water-saving solutions such as monitoring of water flow in a facility and circulating the water in closed systems.
Waste management	1.	Implementing an integrated waste management plan to optimize prevention, reuse, recycling, recovery, and final disposal of waste according to waste hierarchy.
	2.	Separating different waste fractions to allow reuse or recirculation of the single fractions.
Energy management	1.	Implementing measures to optimize energy efficiency.
	2.	Reusing the steam generated during the manufacture of SAPs





Area of discussion:

5.1) Sourcing

• Practical ways to assess and verify sustainability of renewable plastics and polymers? If yes, how much from renewables-based materials?

- Postpone it
- 5.2) Heavy metals / organostannic compounds
- Are these requirements relevant?
- Which other requirements? (e.g. GECA)
- 5.3) SAP
- Are these requirements relevant?
- Which other requirements?
- 5.4) Industrial best practices
- Which measures?





Criterion 6: Other materials

- 6.1) Adhesive materials (NS)
- 6.2) Inks and dyes (NS)
- 6.3) Lotions and fragrances (revision of soaps and shampoo)
- 6.4) Silicone (NS)





6.1) Adhesive materials

Adhesives (Hotmelt adhesives exempted) must not contain:

- Colophony resins,
- Diisobutyl phthalate (DIBP, CAS 84-69-5) and
- Formaldehyde (50-00-0).

This does not apply if

- 1. Not intentionally added, and
- 2. Content in the adhesive material < 100 ppm (0.010% by weight).

For formaldehyde:

- Max 250 ppm in newly produced polymer dispersion
- Max 10 ppm in hardened adhesive (glue)

Assessment and verification: declaration + test results for formaldehyde





6.2) Inks and dyes

(a) The product and any homogeneous part of it must not be dyed.

- Not apply to tampon strings, packaging materials, tape.
- Titanium dioxide in polymers and viscose is exempted (can be used?).
- Materials that are not directly in contact with the skin may be dyed if the dye has the specific function of reducing visibility of the product through white or light coloured clothing.
- (b) Inks and dyes must comply with Criterion 7

Assessment and verification

(a, b) Declaration from producers





6.3) Lotions and fragrances

(a) Products intended for infants, babies and children under the age of twelve years shall be fragrance-free (identified by marketing and wording)

(b) Any ingoing substance added to the product as a fragrance shall be manufactured and handled following the code of practice of the International Fragrance Association (IFRA).

- (c) Black list of fragrances (see next slide)
- (d) Eventual presence of lotions or fragrances declared on the packaging.

Assessment and verification:

Declaration from producer (a), (d) or supplier (b), (c)





Commission

Scientific Committee on Consumer Safety (SCCS) opinion on fragrance allergens in cosmetic products from 2012 (may be updated)

Common name	CAS number	
Cinnamal	104-55-2	
Cinnamyl Alcohol*	104-54-1	
Citral	5392-40-5	
Coumarin	91-64-5	
Eugenol*	97-53-0	
Farnesol*	4602-84-0	
Geraniol*	106-24-1	
Hydroxycitronellal	107-75-5	
Hydroxyisohexyl 3-cyclohexene	21005 04 4	
carboxaldehyde (HICC)	31906-04-4	
Isoeugenol*	97-54-1	
Limonene (oxidised)	5989-27-5	
Linalool* (oxidised)	78-70-6	
Oak moss	90028-68-5	
Tree moss	90028-67-4	
Canaga odorata and Ylang-ylang oil	83863-30-3; 8006-81-3	
Eugenia caryophyllus leaf / Flower oil	8000-34-8	
Jasminum grandiflorum / Officinale	84776-64-7; 90045-94-6; 8022-96-6	
Myroxylon pereirae (Balsam of Peru)	8007-00-9	
Santalum album (Sandelholz)	84787-70-2; 8006-87-9	
Turpentine (oil)	8006-64-2; 9005-90-7; 8052-14-0	

* including their respective esters



6.4) Silicone

a) Where components of the product are treated with silicone, the manufacturer must ensure that employees are protected from the solvents.

b) Neither octamethyl cyclotetrasiloxane D4 (CAS 556-67-2) nor decamethyl cyclopentasiloxane D5 (CAS 541-02-6) can be present in chemical products used in the silicone treatment of components. The requirement does not apply if D4 and D5:

- are not intentionally added to the material or to the final product, and
- are present in the silicone in concentrations below 100 ppm (0.01% by weight)

Assessment and verification:

a) Method used for the treatment of silicone and documentation attesting that employees are protected.

b) Declaration from the supplier





Area of discussion:

6.2) Inks and dyes

- Use of titanium dioxide in polymers and viscose is allowed or not?
- Which specific functions of dyes should be allowed?

6.3) Lotions and fragrances

• How much strict?





Criterion 7: Excluded or limited substances or mixtures

a) Substances and mixtures of relevance for Regulation (EC) No 66/2010

From Art. 6.6 of EU Ecolabel Regulation:

- 1. Horizontal ban based on H-statements / R-phrases
- 2. Derogation request

Any **material** used in the product shall not contain substances meeting criteria for classification with the hazard statements or risk phrases specified below in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EC nor shall it contain substances referred to in Article 57 of Regulation (EC) No 1907/2006. The risk phrases below generally refer to substances. However, if information on substances cannot be obtained, the classification rules for mixtures apply.

Hazard statement	Associated risk phrase(s)
H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R27
H311 Toxic in contact with skin	R24
H330 Fatal if inhaled	R23; R26
H331 Toxic if inhaled	R23
H340 May cause genetic defects	R46
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49
H351 Suspected of causing cancer	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60/61/60-61
H360Fd May damage fertility. Suspected of damaging the unborn child	R60/63
H360Df May damage the unborn child. Suspected of damaging fertility	R61/62
H361f Suspected of damaging fertility	R62
H361d Suspected of damaging the unborn child	R63
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.	R62-63
H362 May cause harm to breast-fed children	R64
H370 Causes damage to organs	R39/23/24/25/26/27/28
H371 May cause damage to organs	R68/20/21/22
H372 Causes damage to organs through prolonged or repeated exposure	R48/25/24/23
H373 May cause damage to organs through prolonged or repeated exposure	R48/20/21/22
H400 Very toxic to aquatic life	R50/50-53
H410 Very toxic to aquatic life with long-lasting effects	R50-53
H411 Toxic to aquatic life with long-lasting effects	R51-53
H412 Harmful to aquatic life with long-lasting effects	R52-53
H413 May cause long-lasting harmful effects to aquatic life	R53
EUH059 Hazardous to the ozone layer	R59
EUH029 Contact with water liberates toxic gas	R29
EUH031 Contact with acids liberates toxic gas	R31
EUH032 Contact with acids liberates very toxic gas	R32
EUH070 Toxic by eye contact	R39-41
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled	R42
H317: May cause allergic skin reaction	R43



Substances or mixtures which change their properties through processing (e.g. become no longer bio-available, or undergo chemical modification in a way that removes the previously identified hazard) are exempted from the above requirement.

Concentration limits for substances or mixtures which may be or have been assigned the hazard statements or risk phrase listed above, meeting the criteria for classification in the hazard classes or categories, and for substances meeting the criteria of Article 57 (a), (b) or (c) of Regulation (EC) No 1907/2006, shall not exceed the **generic or specific concentration limits** determined in accordance with the Article 10 of Regulation (EC) No 1272/2008. Where specific concentration limits are determined they shall prevail over the generic ones.

Concentration limits for substances meeting criteria of Article 57 (d), (e) or (f) of Regulation (EC) No 1907/2006 shall not exceed **0.1% weight by** weight.





(b) Substances listed in accordance with article 59(1) of Regulation (EC) No 1907/2006

No derogation from the exclusion in Article 6(6) of the Regulation (EC) No 66/2010 shall be given concerning substances identified as substances of very high concern and included in the list foreseen in Article 59 of Regulation (EC) No 1907/2006, present in any materials used in the product in concentrations >0.1%. Specific concentration limits determined in accordance with Article 10 of Regulation (EC) No1272/2008 shall apply in cases where the concentration is lower than 0.1%.





Assessment and verification

(a) **For each material** used in the product, the applicant shall provide a declaration of compliance with this criterion, together with related documentation, such as **declarations of compliance** signed by their suppliers, on the **non-classification** of the substances or materials with any of the hazard classes associated to the hazard statements referred to in the above list in accordance with Regulation (EC) 1272/2008, as far as this can be determined, as a minimum, from the information meeting the requirements listed in Annex VII of Regulation (EC) 1907/2006.

This declaration shall be supported by summarized information on the relevant characteristics associated to the hazard statements referred to in the above list, to the level of detail specified in section 10, 11 and 12 of Annex II of Regulation (EC) 1907/2006 (Requirements for the Compilation of Safety Data Sheets). Whenever possible, reference shall be made to the list of registered substances under the REACH regulation scheme, available at: http://echa.europa.eu/information-on-chemicals/registered-substances. In alternative, reference shall be made to the C&L inventory database, available at:

http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventorydatabase



Information on intrinsic properties of substances may be generated by means other than tests, for instance through the use of alternative methods such as in vitro methods, by quantitative structure activity models or by the use of grouping or read-across in accordance with Annex XI of Regulation (EC) 1907/2006. The sharing of relevant data is strongly encouraged. The information provided shall relate to the forms or physical states of the substance or mixtures as used in the final product.

For substances listed in Annexes IV and V of REACH, **exempted from registration obligations** under Article 2(7)(a) and (b) of Regulation 1907/2006 REACH, a declaration to this effect will suffice to comply with the requirements set out above.





Assessment and verification

(b) The applicant shall provide a **declaration of compliance** with this criterion, together with related documentation, such as **declarations of compliance** signed by the material suppliers and copies of relevant **Safety Data Sheets** for substances or mixtures in accordance with Annex II to Regulation (EC) No 1907/2006 for substances or mixtures. **Concentration limits shall be specified** in the Safety Data Sheets in accordance with Article 31 of Regulation (EC) No 1907/2006 for substances and mixtures.

The list of substances identified as substances of very high concern and included in the **candidate list** in accordance with Article 59 of Regulation (EC) No 1907/2006 can be found on the ECHA webiste:

http://echa.europa.eu/chem_data/authorisation_process/candidate_list_tabl e_en.asp

Reference to the list shall be made on the date of application.





- List of H-statements/Risk-phrases + SVHC (specific and generic concentrations)
- Apparently, no critical difficulties
- Any critical points (e.g. derogations from this approach requested)?
- Spread use of sodium polyacrylates, no concerns





Production and EoL

- EoL = Important issue, but... low potential for setting criteria
- Manufacture = 1-12% of the environmental impacts
- 1st = Energy, but... low potential for setting criteria (lack of information)
- Criterion on waste more feasible but less significant

Criterion 8: Minimisation of Production waste

Criterion 9: Guidance on the product disposal





Criterion 8: Minimisation of production waste

Production waste that is not reused or not converted to useful materials and energy < 0.5% by weight of the end product.

Assessment and verification: evidence to be provided, reference to any scheme (e.g. EMS)?

Criterion 9: Guidance on the product disposal

Indicate on the packaging that the product must be disposed in waste bins and not flushed into the toilet.

Assessment and verification: The applicant shall provide a sample of the packaging.





Other issues considered

- Criterion 11: Information appearing on the EU Ecolabel
- Criterion 12: Consideration of social aspects (revision of textiles)





Criterion 11: Information appearing on the EU Ecolabel

Guidance on the use of the logo

Three sentences, such as:

- The product satisfies the most relevant performance and quality tests;
- The use of substances of concern for human health and environment is restricted;
- The product is designed in order to reduce the impact from the use of resources

Assessment and verification:

Sample of the product label and declaration of compliance



Criterion 12: Social aspects

- Fundamental principles and rights at work as specified in the International Labour Organisation's Core Labour Standards shall be observed
- In all production sites
- ILO Core Standards:
- 029 Forced Labour Convention
- 087 Freedom of Association and Protection of the Right to Organise
- 098 Right to Organise and Collective Bargaining
- 100 Equal remuneration
- 105 Abolition of Forced Labour
- 111 Discrimination (Employment and Occupation)
- 138 Minimum Age Convention
- 182 Elimination of the Worst Forms of Child Labour
- Assessment and verification: reports on compliance





Thank you!

Deadline for comments: 30 June 2013

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