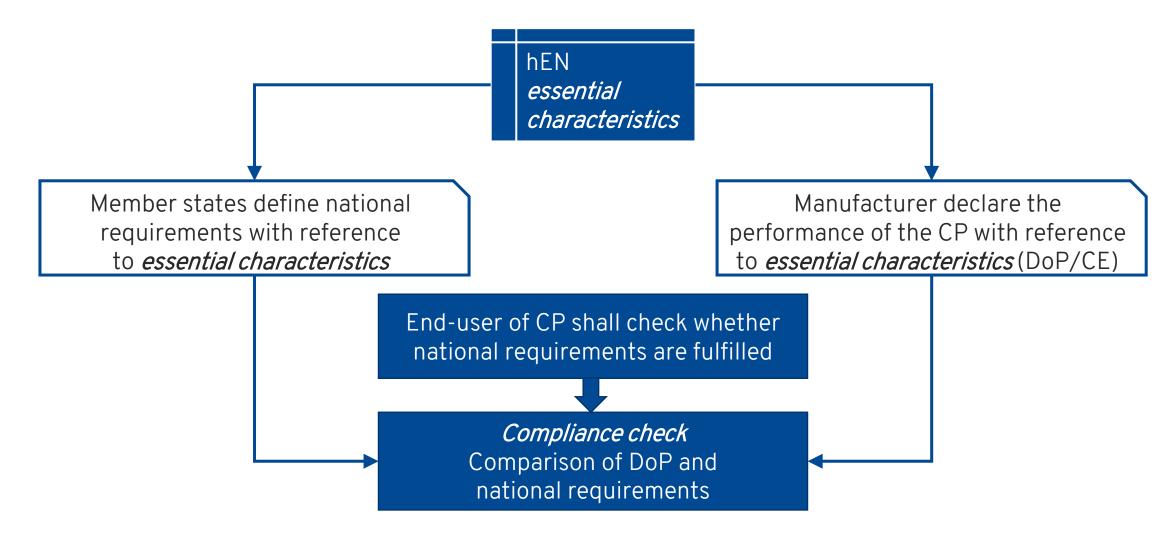


Essential characteristics of construction products 1





Essential characteristics of construction products 2

Conclusions for the implementation of EN 16516

- > Parameters of EN16516 need to be defined as essential characteristics within the hENs
- > Results of tests according to EN16516 should be expressed in an easily understandable way
 - to facilitate reference by MS
 - to facilitate the compliance check by the end user
- > EU-VOC-classes could streamline the process and could offer a solution



Comments on the proposed classes

- Performance classes should be open
- Perfomance classes should not be mixed up with NPD

Class	VOC 0	VOC1	VOC 2	I
sum EU-LCI ratios	sum ≤ 1.0	sum ≤ 2.0	sum > 2.0	
Class	CMR 0	CMR1		
CMR _{VOC}	≤ 1 µg/m³	>1 μg/m ³		
Class	F0	F1	F2	F3
Formaldehyde	≤ 10 µg/m³	≤ 30 µg/m³	REACH limit	>REACH limit
Class	SUM 0	SUM 1	SUM 2	SUM 3
TVOC	≤ 200 µg/m³	≤ 500 µg/m³	$\leq 1000 \mu g/m^3$	>1000 µg/m ³
Class index	Α	В	C	
∑ without EU-LCI	≤ 100 µg/m³	$\leq 200 \mu \text{g/m}^3$	> 200 μg/m ³	



Comments on essential characteristics

- > According to CPR it is needed to define essential characteristics for CE marking + DoP
 - essential characteristic are part of harmonised technical specifications (hEN / EAD)
- > Distinction between
 - essential characteristics for health assessment and
 - essential characteristics for hygienic assessment

is not 100% in line with the current CPR legal text

- > Possible essential characteristics in the sense of the current CPR
 - ✓ Sum of EU-LCI ratios (R value)
 - ✓ CMR_{VOC}
 - ✓ Formaldehyde
 - ✓ TVOC (only in combination with sum of EU-LCI ratios and CMR_{VOC})
 - \times Σ without EU-LCI (is this really a performance of the product?)



Comments on CMRs

- > Important: Exemption for CMRs for which an EU-LCI was derived
 - Threshold carcinogens (e.g. Formaldehyde, Acetaldehyde)
 - repro-tox subst.: often possible to derive health-related limit value
 - These CMRs should be excluded from CMR_{VOC}
 - Comments/justification from EU-LCI-WG in 2017
- > CMR classifications change frequently (ATPs to CLP, Annex VI)
 - Challenging to follow and consider changed classifications
 - Solutions for a pragmatic update process are needed
- > Formaldehyde classified as Carc. 1B (CLP, Annex VI)
 - Threshold carcinogen: EU-LCI adopted
 - REACH restriction: most likely different reference test method
 - REACH emission limit cannot be adopted directly as class F2 (adaptation needed due to different model rooms, loading factors, air exchange rate)



Colour code

- > CE marking printers are often black and white. A color code should be avoided because of unjustified additional effort and costs.
- > The proposed grouping of the various classes does not reflect all possible combinations and does not correspond to existing national requirements.
 - Grouping of classes should be reconsidered or deleted completely.



Future development

<u>Digitalisation could provide alternative solutions</u>

- > Digital DoP using the *smart CE marking* concept as the basis
- > Additionally: App for end-users to check the conformity of an DoP with national requirements
- > Digital approach could work without VOC classes.
- > However, the European VOC classes are required for shortand medium-term implementation of health-related aspects (BRCW3)



Thank you for your attention!

Questions?

Martin Glöckner
Deutsche Bauchemie
E-Mail <u>gloeckner@vci.de</u>
Phone +49 / 69 / 25 56 – 16 33

