

Testing | Monitoring | Certification

Registration, Evaluation, Authorisation and Restriction of CHemicals | REAC-H-CHO

The abbreviation "REACH" is derived from the English title of the regulation "Regulation concerning the Registration, Evaluation, Authorisation and Restriction of CHemicals" and is considered one of the strictest chemical laws in the world. The REACH requirements are intended to ensure a high level of protection for human health and the environment. REACH is based on the principle that manufacturers, importers and downstream users take responsibility for the chemicals and products placed on the European market.

Actual situation

The written vote of the Member States Committee on the ECHA restriction procedure regarding formaldehyde ended on 10 February 2023. Of the 26 participating states, only one country voted against the Commission's proposal.

This means that the Commission's proposal has been adopted and will now be forwarded to the European Parliament and the Council of Europe.

There is now a three-month period left to examine it and, if necessary, veto it, but this requires a qualified majority.

Given the broad support for the proposal, a possible veto is unlikely. For the proposed regulation to enter into force, publication in the European Official Journal is required.

Transitional periods of three years for furniture and wood-based articles and four years for vehicles are foreseen for the implementation.



Table 1: Limit values and areas of application

| Target substance | Formaldehyde and formaldehyde releasing substances |
|---------------------|--|
| Proposed limit | a) 0,062 mg/m³ for wood-based articles and furniture, the interior of the road vehicles; b) 0,080 mg/m³ for articles other than wood-based articles and furniture. |
| Proposed exemptions | Articles within the scope of entry 72, i.e. clothing, textile accessories and footwear; The use of formaldehyde and formaldehyde releasers as biocide subject to Regulation (EU) 528/2012; Medical devices subject to Regulation (EU) 2017/745; Personal protective equipment (PPE) subject to Regulation (EU) 2016/425; Articles intended to come into contact directly or indirectly with food within the scope of Regulation (EC) No 1935/2004; Second-hand articles; Articles only for outdoor use under reasonably foreseeable conditions; Articles exclusively for industrial and professional use if formaldehyde from them does not generate exposure to consumers under foreseeable conditions of use. |

Table 2: List of regulated articles (selection)

| Product group | Product |
|-------------------------------------|---|
| Solid wood and wood-based materials | Particleboard, fibreboard, plywood, glulam (glued laminated timber), laminated veneer lumber, cross laminated timber, blockboard and laminboard, solid wood |
| Floor coverings | Parquet, laminated flooring, sport floor |
| Furniture | Seating furniture, upholstered furniture, box furniture |
| Wall coverings | Wallpapers, tapestries |
| Wall elements | Acoustic panels, wall panels |
| Wood-plastic composites | Wood Plastic Composites (WPC) |
| Insulation material | Thermal insulation products – Wood wool Thermal insulation materials – Wood fibres |
| Other products | Doors, windows, skirting boards, curtains, car interiors, pallet blocks, foams, abrasives |

Test method

According to Appendix X, the tests for determining the formaldehyde release must be carried out according to a chamber method

Table 3: Test parameter

| Temperature | (23 ± 0,5) °C |
|--|--|
| rel. humidity | (45 ± 3) % |
| Air exchange | $(1 \pm 0,05) h^{-1}$ |
| Loading rate | (1± 0,02) m²/m³; based on wood-based panel loading rate* |
| Analytic procedure | Suitable analysis method should be used (without specification) |
| Sampling | Suitable method for sampling should be used (without specification) |
| Determination of formaldehyde in the chamber | Sampling shall be done at least twice a day, the time interval between the two samplings shall be more than 3h |
| Test period | Sufficiently long to determine the compensation concentration and should not exceed 28 days |
| Assessment | Steady-state concentration measured in the chamber |

^{*} for other materials or products, if such a loading factor is clearly not realistic under the foreseeable conditions of use, loading factors according to clause 4.2.2 of EN 16516 may be used.

Note: The air change rate remains at (1 ± 0.05) h⁻¹ according to the specifications.

Correlations

If data from a test method under the above reference conditions are not available or not suitable for the measurement of formaldehyde released from a special article, data from a test method under non-reference conditions may be used if there is a scientifically verified correlation between the results of the test method used and the reference conditions.

Further information

Fraunhofer WKI:

https://www.wki.fraunhofer.de

Quality Assessment:

https://www.wki.fraunhofer.de/en/departments/qa/profile.html

Testing | Monitoring | Certification:

https://www.wki.fraunhofer.de/en/departments/qa/profile.html

Contact

qa-info@wki.fraunhofer.de

Fraunhofer WKI Riedenkamp 3 38108 Braunschweig Germany www.wki.fraunhofer.de

© Fraunhofer WKI 07/2023