



Consumer products

HCT-202307-04

## REACH Annex XVII add formaldehyde releasing substances restriction

On July 17, 2023, the European Union published in the Official Journal of the European Union amending Regulation (EU) 2023/1464 on the Restrictions of the REACH Regulation (Annex XVII of REACH), which adds a new restriction on formaldehyde and formaldehyde-releasing in Entry 77 of the Restrictions of the REACH Regulation. This provision will enter into force on the 20th day after its publication in the Official Journal of the European Union.

The restriction on formaldehyde and formaldehyde-releasing substances are as follows:

| Substance  | Conditions of restriction   |
|--|---|
| '77. Formaldehyde<br>CAS No 50-00-0<br>EC No 200-001-8<br>and formaldehyde-releasing<br>substances | <ol style="list-style-type: none"> <li>1. Shall not be placed on the market in articles, after 6 August 2026, if, under the test conditions specified in Appendix 14, the concentration of formaldehyde released from those articles exceeds:               <ol style="list-style-type: none"> <li>(a) 0,062 mg/m<sup>3</sup> for furniture and wood-based articles;</li> <li>(b) 0,080 mg/m<sup>3</sup> for articles other than furniture and wood-based articles.</li> </ol>               The first subparagraph shall not apply to:               <ol style="list-style-type: none"> <li>(a) articles in which formaldehyde or formaldehyde releasing substances are exclusively naturally present in the materials from which the articles are produced;</li> <li>(b) articles that are exclusively for outdoor use under foreseeable conditions;</li> <li>(c) articles in constructions, that are exclusively used outside the building shell and vapour barrier and that do not emit formaldehyde into indoor air;</li> <li>(d) articles exclusively for industrial or professional use unless formaldehyde released from them leads to exposure of the general public under foreseeable conditions of use;</li> <li>(e) articles for which the restriction laid down in entry 72 applies;</li> <li>(f) articles that are biocidal products within the scope of Regulation (EU) No 528/2012 of the European Parliament and of the Council</li> <li>(g) devices within the scope of Regulation (EU) 2017/745;</li> <li>(h) personal protective equipment within the scope of Regulation (EU) 2016/425;</li> <li>(i) articles intended to come into contact directly or indirectly with food within the scope of Regulation (EC) No 1935/2004;</li> <li>(j) second-hand articles.</li> </ol> </li> <li>2. Shall not be placed on the market in road vehicles after 6 August</li> </ol> |



# HONGCAI TESTING

2027 if, under the test conditions specified in Appendix 14, the concentration of formaldehyde in the interior of those vehicles exceeds  $0,062 \text{ mg/m}^3$ .

The first subparagraph shall not apply to:

- (a) road vehicles exclusively for industrial or professional use unless the concentration of formaldehyde in the interior of those vehicles leads to exposure of the general public under foreseeable conditions of use;
- (b) second-hand vehicles.

The following Appendix 14 is added:

## **1. Measurement of formaldehyde released to indoor air from articles referred to in paragraph 1, first subparagraph, of entry 77**

The formaldehyde released from articles referred to in paragraph 1, first subparagraph of entry 77 shall be measured in the air of a test chamber under the following cumulative reference conditions:

- (a) the temperature in the test chamber shall be  $(23 \pm 0,5) \text{ }^\circ\text{C}$ ;
- (b) the relative humidity in the test chamber shall be  $(45 \pm 3) \%$ ;
- (c) the loading factor, expressed as the ratio of the total surface area of the test piece to the volume of the test chamber, shall be  $(1 \pm 0,02) \text{ m}^2/\text{m}^3$ . This loading factor corresponds to the testing of wood-based panels; for other material or products, if such a loading factor is clearly not realistic under foreseeable conditions of use, loading factors in accordance with Section 4.2.2 of EN 16516 may be used;
- (d) the air exchange rate in the test chamber shall be  $(1 \pm 0,05) \text{ h}^{-1}$ ;
- (e) an appropriate analytical procedure for measuring the formaldehyde concentration in the test chamber shall be used;
- (f) an appropriate method for sampling of the test pieces shall be used;
- (g) the formaldehyde concentration in the air of the test chamber shall be measured at least twice per day throughout the test with a time interval between two consecutive samplings of 3 hours at a minimum; the measurement shall be repeated until sufficient data are available to determine the steady state concentration;
- (h) the duration of the test shall be sufficiently long to allow the determination of the steady state concentration and shall not exceed 28 days;
- (i) the steady state concentration of formaldehyde measured in the test chamber shall be used to verify the compliance with the limit value of formaldehyde released from articles referred to in paragraph 1, first subparagraph, of entry 77.



# HONGCAI TESTING

If data from a test method using the reference conditions specified above are not available or suitable for the measurement of the formaldehyde released from a specific article, data obtained from a test method using non-reference conditions may be used, where there is a scientifically valid correlation between the results of the test method used and the reference conditions.

## **2. Measurement of formaldehyde concentration in the interior of vehicles referred to in paragraph 2, first subparagraph, of entry 77**

For road vehicles, including trucks and buses, the formaldehyde concentration shall be measured in ambient mode in accordance with the conditions specified in ISO 12219-1 or ISO 12219-10 , and the concentration measured shall be used to verify the compliance with the limit value referred to in paragraph 2, first subparagraph, of entry 77.

Formaldehyde is a high production volume chemical with a wide array of uses. 98 % of the formaldehyde manufactured or imported in the Union is used as a chemical intermediate in the production of formaldehyde-based resins, thermoplastics and other chemicals, which are further used in a broad range of applications. Formaldehyde-based resins are used in the production of a wide variety of articles, which, as a result, may release formaldehyde. The primary use of formaldehyde-based resins is in the manufacturing of wood-based panels, where they act as a bonding agent for wood particles. Such resins are also used in the production of other wood-based products like furniture and flooring, and for wallpapers, foams, parts for vehicles and aeroplanes, textile and leather products.

Original link : [\(EU\) 2023/1464](#)

### **Contact us:**

**Shenzhen Hongcai testing technology co., LTD. (HCT)**

Web: <http://www.hct-test.com/>

Hotline: 400-0066-989 T: (86) 755 8416666

Email: [service@hct-test.com](mailto:service@hct-test.com)

Add: Building B, Tianji Industrial Park, Floor 1&2&3 No.30-9 Laiyin Road,

Xinsheng Community, Longgang Street, Longgang District, Shenzhen,

Guangdong, China

**Statement:** This publication is only educational and does not replace any legal requirements or applicable rules. Information included in the publication will not be revised. HCT does not guarantee that the content contained in the publication without any errors or will meet any particular performance or quality standards. If there is no consent of HCT in advance, please do not quote or refer any information contained in this publication.