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COMMISSION IMPLEMENTING DECISION (EU) 2026/2153

of 28 September 2026

allowing Slovakia to authorise biocidal products containing ethylene oxide for the protection of cultural heritage

(notified under document C(2026) 6723)

(Only the Slovak text is authentic)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products ([1]), and in particular Article 55(3) thereof,

After consulting the Standing Committee for Biocidal Products,

Whereas:

(1) Ethylene oxide in product-type 2 (disinfectants and algaecides not intended for direct application to humans or animals), as defined in Annex V to Regulation (EU) No 528/2012, was included in the work programme for the systematic examination of all existing active substances contained in biocidal products referred to in that Regulation, as set out in Annex II to Commission Delegated Regulation (EU) No 1062/2014 ([2]). An application for approval of ethylene oxide in product-type 2 was submitted on 1 December 2009.

(2) Commission Implementing Decision (EU) 2025/1074 ([3]) found that the representative product included in the application for approval was not within the scope of Regulation (EU) No 528/2012 and that, as a consequence, it was appropriate to not approve ethylene oxide as an active substance for use in biocidal products of product-type 2.

(3) Pursuant to Article 55(3) of Regulation (EU) No 528/2012, on 9 December 2025, Slovakia submitted to the Commission an application for a derogation from Article 19(1), point (a), of that Regulation, in which it asked to be allowed to authorise biocidal products containing ethylene oxide for the protection of cultural heritage, including archive heritage.

(4) According to the information provided by Slovakia, the use of ethylene oxide is essential for the protection of archives and other cultural heritage objects, since it appears to be the only efficient technique to control the variety of harmful organisms can threaten such objects. Microbiological contamination is one of the highest-risk factors threatening certain goods of cultural heritage. Active biological contamination is harmful to the affected materials, which undergo a degradation of functionality in bulk, through loss of strength, change in colour, or the formation of colour stains. According to Slovakia, for people handling those materials (archivists, librarians, restorers, researchers or other employees), the increased content of microorganism spores in the air represents a significantly unfavourable factor leading to allergies, bronchitis and other pathological burdens. A significant risk is the spread of contamination and the threat to entire collections. If a contaminated item is insufficiently treated, it can become a source for the spread of contamination to other, as yet uncontaminated, items in the collection. According to Slovakia, in museums, archives, and galleries where items are stored close together, uncontrolled contamination can quickly destroy a vast number of valuable artefacts, as a domino effect occurs.

([1]) OJ L 167, 27.6.2012, p. 1, ELI: http://data.europa.eu/eli/reg/2012/528/oj.

([2]) Commission Delegated Regulation (EU) No 1062/2014 of 4 August 2014 on the work programme for the systematic examination of all existing active substances contained in biocidal products referred to in Regulation (EU) No 528/2012 of the European Parliament and of the Council (OJ L 294, 10.10.2014, p. 1, ELI: http://data.europa.eu/eli/reg_del/2014/1062/oj).

([3]) Commission Implementing Decision (EU) 2025/1074 of 2 June 2025 not approving ethylene oxide as an existing active substance for use in biocidal products of product-type 2 in accordance with Regulation (EU) No 528/2012 of the European Parliament and of the Council (OJ L, 2025/1074, 3.6.2025, ELI: http://data.europa.eu/eli/dec_impl/2025/1074/oj).

(5) According to Slovakia, there are no appropriate alternatives for the treatment of cultural heritage objects, including archive material. In relation to archive material, dusting and buffing with ethanol is effective only for localised and surface contamination but not for internal contamination, may alter certain inks and pigments, requires long and delicate treatment and is therefore not suitable for the treatment of large volume fungal infestation. Anoxia is effective against insects, however, it is ineffective against mould and bacteria. Gamma radiation is a difficult to replicate technique which requires specific equipment. In addition, gamma radiation has been shown to cause significant degradation of cellulose, significantly reducing the stability and durability of documents. Low temperature techniques (freezing) can stop the growth of mould but are not effective against spores.

(6) As indicated by Slovakia in the application, products containing ethylene oxide are used by fumigation by trained professionals. On account of the hazard properties of ethylene oxide, disinfection with products containing it is carried out only in fumigation chambers exclusively in specialised facilities adhering to strict safety regulations and environmental standards. Each of the operating purpose-built facility includes an abator, which prevents emissions of ethylene oxide into the atmosphere. After disinfection, a necessary sufficiently long ventilation phase is implemented, to remove gas residues from the objects. Provided all control procedures, regulations, and personnel instructions are followed, the use of this technology is safe.

(7) The information and justification contained in the application submitted by Slovakia shows that the use of ethylene oxide is essential for the protection of cultural heritage and that there are no appropriate alternatives are currently available for the treatment of cultural heritage objects in Slovakia, since all the alternative techniques currently available present disadvantages, as they are either not sufficiently effective or can cause damage to the materials treated.

(8) Based on the information and justifications contained in the application submitted by Slovakia, it is appropriate to conclude that ethylene oxide is essential for the protection of cultural heritage in Slovakia and that no appropriate alternatives are currently available. Slovakia should therefore be allowed to authorise the making available on the market and use of biocidal products containing ethylene oxide for the protection of cultural heritage,

HAS ADOPTED THIS DECISION:

Article 1

Slovakia may authorise biocidal products containing ethylene oxide for the protection of cultural heritage until 31 July 2031.

Article 2

This Decision is addressed to the Slovak Republic.

Done at Brussels, 28 September 2026.

For the Commission
Olivér VÁRHELYI
Member of the Commission