Approval of sodium hypochlorite (bleach) as biocidal product

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EU approves the use of sodium hypochlorite (bleach) as biocidal product

Commission Implementing Regulation (EU) 2025/524 of 20 March 2025 granting a Union authorisation for the biocidal product family Sodium hypochlorite Liquid disinfectant biocidal product family in accordance with Regulation (EU) No 528/2012 of the European Parliament and of the Council

Update

The European Union (EU) has approved the use of sodium hypochlorite (commonly used in bleach products) as a general disinfectant, and as a disinfectant in food and feed areas (Product types 02 and 04). Users of these products in non-EU countries should be reminded that chlorate residues in food coming from such products must not exceed EU maximum residue levels (MRLs) set for chlorate.

Impacted products

Any food that may come into contact with water, surfaces, or equipment treated with sodium hypochlorite (bleach) that could potentially lead to chlorate residues.

What is changing?

Prior to this Regulation (2025/524), sodium hypochlorite was already included in the list of approved active substances (Regulation 528/2012), and certain biocidal products containing sodium hypochlorite were authorised by EU Member States. This Regulation authorises the use across the EU of a group of biocidal products – “Sodium hypochlorite Liquid disinfectant” – in Product type 02 (general disinfectants, not for direct application to humans or animals) and certain Product type 04 (disinfectants for food and feed areas).

Foods that have come into contact with biocides containing sodium hypochlorite **must not contain levels of chlorate that exceed the MRLs** set for chlorate (see EU Pesticide database – chlorate MRLs). To limit the risk of non-compliance with these levels, the EU authorisation of Product type 04 products containing sodium hypochlorite is restricted to professional users (who

can be trained to rinse hard non-porous surfaces after their use) and may not be aimed at non-professional users (the general public).

Why?

According to the European Chemical Agency's opinion (ECHA 2022), the main concern in relation to the application of these biocidal products was not sodium hypochlorite itself, but the formation of **chlorate** as a by-product, particularly where a biocidal product is misused or overused. The EU treats chlorate residues as a serious food safety issue and wishes to limit the contamination that may result from the use of common disinfectants such as bleach.

Timeline

The authorisation of these products is valid in all EU Member States from **13 April 2025** to 31 March 2035.

What are the major implications for exporting countries?

MRLs set for chlorate (see EU Pesticide database – chlorate MRLs) apply to **all** sources of chlorate, including residues from water or biocidal products. All imported food must comply with these MRLs, regardless of the source of chlorate. Products not meeting these MRLs will be rejected at the EU border.

Recommended Actions

Even indirect exposure to chlorate – such as through cleaning equipment or washing water – can result in exceeding the EU's MRLs. Although contamination is often unintentional, it can still lead to border rejections. To prevent this, when using biocidal products, it is essential to strictly follow the use recommended in this Regulation, implement proper rinsing protocols, regularly monitor chlorate levels in food, and apply appropriate risk mitigation measures. Staff should be properly trained in hygiene and disinfection procedures, particularly when using biocidal products in food handling areas.

Background

Under Regulation 528/2012, the active substance used in the biocidal product must be assessed and authorised by the EU. Every biocidal product containing that substance must then be authorised according to its specific formulation, intended use and user category (e.g. professional users or general public. A company can choose to either have a product authorised by any EU Member State ("national authorisation") or by the EU ("Union authorisation"). The procedure for a national authorisation is typically quicker, but to sell an authorised product beyond the Member State that grants the national authorisation, the company must request "mutual recognition" of the authorisation in each market where the product is sold. A Union authorisation takes longer but allows a company to sell the product in all EU markets.

Where a group of biocidal products has the same active substances and similar uses, a company can seek authorisation for the whole group as a biocidal product family.

Resources

Regulation 528/2012 concerning the making available on the market and use of biocidal products

Regulation 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin

Regulation 2020/749 as regards maximum residue levels for chlorate in or on certain products

ECHA (2022) Opinion on the Union authorisation of Sodium hypochlorite Liquid disinfectant biocidal product family

European Chemicals Agency (ECHA) Authorisation of biocidal products

European Commission Biocidal products

Sources

Regulation (EU) 2025/524 granting a Union authorisation for the biocidal product family Sodium hypochlorite Liquid disinfectant biocidal product family

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