

EuroWindoor feedback to the public consultation on derogation to the exclusion criteria for Propiconazole

EuroWindoor represents the interest of window and door manufacturers all over Europe, including wooden products. In this regard, we have a comprehensive view of production processes and of the technologies available to protect wooden frames from biological attacks (blue stains, white rot, brown rot, insects).

Propiconazole is currently used as the main active substance in biocidal products for wood preservation of window and door frames due to its high efficacy spectrum, even at low concentration. Its unique efficacy against all main fungi makes it an essential component in the long lifespan of wooden windows and doors. Further evidence of the role of Propiconazole for the window and door industry can be found in the CEI-Bois - EuroWindoor - SBS joint position [1].

EuroWindoor believes Propiconazole meets the 3 derogation criteria simultaneously, as explained in the below statements.

1. Feedback on derogation of Article 5 2. (a), (b) and (c) of the BPR

(a) Risk from human, animal and environmental exposure to the active substance

Regarding the risk for human exposure

Risks for human health essentially occur at 3 different levels: risk for industrial workers (e.g. within impregnation plants), risk for professional workers/craftsmen (in workshops or on construction sites) and risk for end-users (during the lifetime of the treated product).

Regarding the exposure risk for industrial workers, the industry already has in place a series of risk management measures:

1. All industrial impregnation processes used by the window and door industry are performed in closed loop systems (e.g. spray tunnels) or in dipping tanks where excess liquid is recycled. By design, these systems do not allow the spread of biocidal product containing Propiconazole into the rest of the plant, therefore protecting workers from direct exposure.
- *Any direct contact for workers is prevented by avoiding any spillover or splashing into other surfaces of the plant.*
2. In order to ensure the use of proper Personal Protective Equipment (PPEs), the CLP regulation (Classification, Labelling and Packaging) sets requirements for all workers in charge of handling and maintenance operations. These are required to use PPEs as soon as they need to handle treated articles or to proceed to maintenance operations on the impregnation lines (especially hand and skin protection).
- *Workers in charge of maintenance and cleaning processes of wood impregnation installations must use adequate PPEs to limit the risk of skin or inhaling exposure.*

In addition, and as stated in the Biocidal Product Committee's (BPC) opinion [2] on Propiconazole, *"with regard to human health exposure, the risk related to primary exposure is considered acceptable with a conventional risk assessment (excluding ED properties) for industrial and professional users when appropriate personal protection equipment (PPE) are worn"*.

Regarding the exposure risk for professional workers and craftsmen:

As for industrial use, the CLP regulation – via the mandatory publication of Safety Data Sheets (SDS) – requires producers of biocidal products to inform professional users about the appropriate equipment to wear while using a specific product. The use of PPEs therefore becomes mandatory for wood treatment applications (e.g. brushing) in accordance with relevant material safety data sheet.

As stated in the Biocidal Product Committee's (BPC) opinion [2] on Propiconazole, "*with regard to human health exposure, the risk related to primary exposure is considered acceptable with a conventional risk assessment (excluding ED properties) for industrial and professional users when appropriate personal protection equipment (PPE) are worn*".

Regarding the exposure risk for end-users:

The exposure risk for end-users is strongly related to the direct exposure of the treated surface of the wood. This exposure is de-facto prevented as soon as the surface of the wooden frame is coated (e.g. with paint) or is protected with a metal cladding (e.g. rain proofing aluminium cladding).

As described in the Summary of Product Characteristics (SPC) for each biocidal product, treated wood must be covered with a top coat before taken into service. This prevents finished products from any direct skin contact for end-users.

In addition, and as stated in the BPC's opinion [2] on Propiconazole, the secondary risk exposure for end-users was deemed acceptable under conventional risk assessment.

Regarding the risk for animal and environmental exposure

The risks associated to animal health and environmental exposure are both connected to the risk of leaching, either during the treated product service lifetime (e.g. if treated surface is exposed to rain water) or at the end of life when handled as waste (if the waste is stored outdoors).

Risk management of industrial process:

One must remember that most processes used for wood impregnation (dipping, deluging, spray coating, bathing, pressure treatment etc.) are conducted in a controlled environment, via closed-loop systems which contain the biocidal product (impregnation tanks, dipping reservoirs, spraying tunnels, pressure vessels) and recover the excess liquid for further re-use or safe disposal.

- *Industrial processes are therefore designed in a way that no leaching can occur during the impregnation/coating process itself, and that all excess liquid is either re-used or collected for future safe disposal.*

Risk management of accident:

Wood impregnation plants are designed in a specific way to prevent external leaching in case an accident should occur (e.g. leak or failure of a biocidal product storage tank). This design aims at containing leaked liquid within the boundaries of the plant via the use of hard impermeable floors sloping towards a spill storage tank. Most common designs and concepts have been documented in a BAT report from the JRC [3].

- *In the event of an accident leading to the spread of biocidal product, plants are designed to prevent any spillover into ground water, rain water or surrounding environment.*

Risk management of by-product wastes:

All woodwork processes – including window and door frame manufacturing processes – are likely to generate waste like wood chips or saw dust. To prevent generation of impregnated wood waste, window and door manufacturers are conducting treatment operations on finished articles (e.g. spray coating of finished window frame). This practice prevents the generation of impregnated wood chips and therefore limits the risk of leaching coming from e.g. outdoor storage of by-product waste.

- *In window and door factories, by-product wastes such as wood chips are generated before the impregnation process, preventing any storage of treated wood chips.*

Risk management of final product leaching:

The leaching risk of treated products like wooden windows and doors depends on the presence of a protective layer to prevent rain water to reach the impregnated surface of the wood. Windows and doors – like any other treated article – are required by the SPCs to be covered with a top coat. For the specific window and door industry, these products are also sometimes additionally

protected by an aluminium cladding, therefore leading to an increased protection against leaching.

- *Wooden windows and doors are all treated with a top coat to prevent direct exposure to rain water and leaching.*

(b) Propiconazole is essential to prevent or control a serious danger to human health, animal health or the environment

Our industry would like to stress the crucial role and benefits associated to the use of wood in the construction sector:

- It meets most criteria as critical construction material: lightweight, mechanically resistant, thermal insulating, easy to process etc.
- Wood is locally available, renewable, protects biodiversity and is sustainable as it stores CO₂.
- Wood has a good environmental footprint compared to other materials and is therefore becoming more and more popular in the construction sector
- The increasing share of responsible certified forestry (such as FSC or PEFC) used by the window and door industry is rapidly establishing wood as a long-term sustainable material for the construction sector

Despite these benefits, the wood coming from sustainably sourced European forestry needs to be protected from biological attacks due to the humid European climate as soon as it is exposed to outdoor conditions (Use Class 3 according to EN 335). In case of a non-renewal of Propiconazole for PT8, the risks for society and environment would be as listed below:

- Increase of CO₂ emissions of construction materials due to a dramatic shortening of the lifespan of windows and doors – or to a substitution with more CO₂-intensive materials. The benefits of the CO₂ capture by wooden products are indeed strongly dependent on the ability of the product to remain in service for a long period of time.
- Over-exploitation of forests with specific slow-growing durable species (e.g. oak, tropical species) to avoid the use of Propiconazole, therefore risking a deforestation in Europe (and outside Europe) due the limited stock and the slow-growing nature of these forests.
- A use of higher concentrations of other active substances (to keep similar levels of protection), therefore increasing the potential risk of exposure for workers and end-users.

(c) Not approving the active substance would have a disproportionate negative impact on society

Due to its outstanding efficacy properties – even when used at low concentrations – Propiconazole is widely used by the wooden window and door industry across Europe, especially in situations where wood is exposed to humid conditions or to the outdoor environment. Several studies conducted at national level have shown [4] [5] [6] [7] that there is currently no Propiconazole-free alternative approved in most Member States, despite the need for wood impregnation/protection for all Use Class 3. A non-renewal of Propiconazole will not only weaken the wood preservation industry, but most importantly will threaten the entire value chain in the wood sector, including home-grown sustainable forestry, forestry certification, sawmill industry, woodwork industry, treated wood industry, wooden windows and doors, specialized craftsmen such as carpenters (working with both façade and roof structures), façade cladding and outdoor decking:

- The entire window and door industry would be forced to switch either to significantly more expensive wood species (e.g. 4-5 times higher prices for oak) which are not available in sufficient quantities and rarely certified (e.g. FSC or PEFC), to niche modified wood (e.g. Accoya) which are available in even fewer quantities or to switch to more CO₂-intensive materials.
- Production and assembly lines – including all woodwork machineries – are built and adjusted to process specific wood species. A material change would necessarily lead to a re-built of the production lines.

- A change towards non-sustainable wood production would also bring the risk of outsourcing local businesses – many of these species being grown outside EU.
- Any global switch to alternative species or modified wood would initiate an immediate global shortage due to the mismatch between the current and the alternative supply.
- All in all, not approving the active substance would have a disproportionate negative impact on society when compared with the risk to human health, animal health or the environment arising from the use of the substance.

2. Conclusion

Based on the above-described argumentation, EuroWindowor believes that all derogation criteria of Article 5 2. (a), 5 2. (b) and 5 2. (c) are met for the active substance Propiconazole. We also would like to stress that the specific risk for the environment and the disproportionate impact for society are directly linked to the absence of alternative to Propiconazole (see “Other comments”).

Our industry is currently working with the wood preservation industry to find long term solutions which – in addition to the development time – require more than 5 years to be tested and approved [8].

EuroWindowor therefore strongly support a renewal of the approval of Propiconazole based on its limited risk for human health and for the environment, for the unique benefits it brings to fight climate change thanks to the preservation of wood (and carbon storage) for a long period of time, and for complete absence of alternatives in European Member States which threatens the entire value chain of the wood industry.

3. Other comments

In addition to the previous comments, EuroWindowor would like to highlight the conclusion of the BPC’s opinion on the application for approval of Propiconazole which clearly states that the “lack of sufficient number of alternatives is obvious” [2].

Other Biocidal solutions would be of lower-grade and would involve the use of treated wood with reduced efficacy, stability and integrity (e.g. no protection against wood rotting or wood destroying fungi).

When investigating other types of alternatives like different wood species or treatment (durable species, modified wood...), one should conclude that these solutions are currently not available in sufficient quantities (direct risk of shortage), represent a major price increase, and essentially come at a greater environmental impact than locally sourced wood species such as pine or spruce.

Looking at the strict criteria that the wooden window and door industry must observe in Europe, in particular the need for supplying Use Class 3 protection for most applications, a non-renewal of Propiconazole would de-facto leave the industry without any acceptable solution for wood preservation. Such a decision would have a disastrous impact on the building sector which should instead prepare its decarbonization by gradual increase of wood-based materials.

4. References

- [1] “The use of Propiconazole in wood preservatives for timber windows and doors”, joint Position CEI-Bois – EuroWindowor – SBS, 2021-08 ([link](#))
- [2] “Opinion on the application for approval of the active substance: Propiconazole, Product type: 8”, ECHA/BPC/324/2022, Biocidal Products Committee (BPC), 2022.03.09 ([link](#))
- [3] “BAT Reference Document on Surface Treatment Using Organic Solvents including Preservation of Wood and Wood Products with Chemicals”, Joint Research Center, 2020 (14.3.2.4 Emissions to water, p 457) ([link](#))
- [4] “Study on authorized wood preservatives for industrial use as primers to manufacture wooden windows”, Holzforschung Austria, 2021.03 (HFA-A.Nr.: 2635/2020/1-HO) ([link](#))

- [5] “Approved wood preservatives in Belgium and The Netherlands”, Stichting Hout Research, 2021.09.02 (21.0298-B) ([link](#))
- [6] “PT 8 products approved in Denmark, Norway, Sweden and Finland”, DHI Group, 2021.05.07 (11817983) ([link](#))
- [7] “Survey of products registered to date for the preservation of wood intended for the manufacture of exterior joinery”, Institut Technologique FCBA, 2021.03.15 (n°401/20/16ZZBis) ([link](#))
- [8] “Statement on time-scheduling for the substitution of wood preservatives”, Wood Biology and Wood Products, Georg-August-Universität Göttingen, 2021.07.13 ([link](#))

About EuroWindowor AISBL – EuroWindowor AISBL was founded as an international non-profit Association, in order to represent the interests of the European window, door and facade (curtain walling) sector. Our 19 national associations speak for European window, door and facade manufacturers that are in direct contact with consumers, and thereby having large insights on consumers' demands and expectations. We are at the forefront interacting with dealers, installers and consumers buying windows and doors, and the companies behind the associations cover selling all over Europe.



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