

EuroWindowor answer to the public consultation on potential candidates for substitution of Propiconazole

I. Personal information

Secretary General Frank Koos

II. Organisation

EuroWindowor AISBL (Industry or trade association)

III. Information

General information

Maintaining and expanding the use of the sustainable native material wood in the construction sector is an important contribution for the EU to achieve climate neutrality by 2050. Particularly in light of the New European Bauhaus ambition as part of the European Green Deal to use more natural and organic construction materials, wood remains an essential material for buildings and renovation projects.

Comment Regarding

PT8 – Wood Preservatives

1. Alternative Identity and Properties

Potential alternatives to Propiconazole should be seen from 2 different perspectives:

- Alternative wood preservatives
- Alternative wood species

ALTERNATIVE WOOD PRESERVATIVES

Most biocidal products used for wood preservation do currently contain a combination of at least 2 Active Substances. The combination of substances is required to meet efficacy against all target organisms (one substance alone cannot meet efficacy against wood discolouring fungi, wood rotting/destroying fungi and insects) but also to limit the concentration of biocide in the final product (the combination of substances allows to target specific organisms with low concentration of biocide thanks to complementarity of efficacies).

There are currently 3 Actives Substances used for wood preservation fulfilling the needed efficacy and suitable for window and door application (which requires a preventive treatment of wood Use Class 3). These substances can however only be seen as complementary and not as alternatives for the aforementioned reasons:

- Propiconazole, falling under the BPR Exclusion criteria Article 5 (1) in December 2022
- Tebuconazole, also up for renewal at an earlier date (September 2022). Given the similar properties of Tebuconazole, it is likely to also fall under the BPR Exclusion criteria Article 5 (1)
- IPBC, which only has efficacy against wood discolouring fungi (“blue stains”)

In addition, one potential alternative might develop in the coming year with biocidal products based on the active substance Penflufen. However, there are no biocidal products based on Penflufen currently approved in EU Member States that meets Use Class 3 (needed for windows due to their exposure to outdoor conditions).

Out of 4 studies conducted by national institutes for wood technologies, covering a total of 9 countries (Austria, Belgium, Denmark, Finland, France, Germany, Norway, Sweden and The Netherlands), almost no suitable alternative biocidal product was found. Only exceptions are based on Tebuconazole (only 1 suitable product family was found in some countries), which does not constitute an alternative since the substance will be out for substitution earlier than Propiconazole (September 2022).

Other alternative biocidal products are usually solely based on the active substance IPBC and cannot meet any efficacy against wood destroying fungi (only efficient against discolouring fungi “blue stains”).

The complete overview of findings from the above-mentioned studies can be found in the attached CEI-Bois – EuroWindow – SBS joint position on use of Propiconazole in wood preservatives.

ALTERNATIVE WOOD SPECIES

One alternative to achieve durability criteria for timber windows and doors would be to use durable wood species which do not require the same level of preservation as commonly used species.

This approach however does not constitute a scalable solution due to the limited resources of durable wood species in Europe. Most timber windows and doors use softwood as the main material for frame (e.g. pine, spruce) because of its availability and its processing easiness.

Besides, even by using durable hardwood species, timber window and door manufacturers in most situations still have to use surface treatment with Propiconazole to maintain the surface aesthetics of the wood.

The locally available resources of European timber would not allow a conversion of the entire window and door industry, even less so for the entire woodworking industry.

Modified wood might also constitute an alternative solution to wood impregnation or to the use of durable wood species. However, there are limitations to the use of these modified woods: firstly, due the recent development of this technology, the worldwide available resources are extremely limited and cannot cover a significant share of the timber consumption in the window and door industry. Secondly, most of the suppliers of modified wood currently export from regions or countries outside EU, adding an environmental burden due to transportation.

2. Technical Feasibility

The efficacy of Propiconazole essentially aims at wood-destroying fungi (“white-rot” and “brown-rot”).

Its usability for efficient industrial processes such as flow coating makes it the most relevant core active substance for wood preservatives.

The main difficulties for using alternatives in the window industry relates to the compatibility of the biocidal product with other elements of a window/door: corrosion of metal elements and discolouring are the main challenge to face when replacing a substance (or a product) with an alternative.

Besides, testing over long periods of time are required to ensure a long lifespan of windows and doors (typically: 3-5 years of testing), so are aging evaluation and material compatibility testing.

3. Economic Feasibility

As described in “Alternative Identity and Properties”, there is today a lack of suitable alternative to the use of Propiconazole in wood preservatives.

In case manufacturers would be forced to use “durable” wood species from outside EU, this would have a significant impact of the cost of raw materials as well as inducing a strong stress on material availability (high risk of shortage due to limited resource).

Besides, when using EU-source and responsible wood, manufacturers are opting for a cost-effective and sustainable choice of raw material. However, most of these EU-sourced species require wood preservatives and the use of a less efficient solution will lead to a shortening of the lifespan of windows and door.

Windows and doors are typically installed for 30 years and more: if less protected against biological attacks, their lifespan would be reduced to a few years only, leading to a more frequent replacement and higher environmental impact.

According to the Propiconazole Impact Assessment (2018), the impact on downstream users and end-users (over 5 years) amounts to more than 153M EUR.

4. Hazards and Risks of the Alternative

As highlighted before, the only alternative biocidal products which are not containing Propiconazole are based on Tebuconazole (which has shorter end of approval period). Other solutions are of much lower efficiency and cannot meet all required efficacy criteria for the preservation of timber windows and doors.

Should the industry be forced to use less efficient solutions, this would inevitably compromise the structural integrity of windows and doors due to the absence of protection against wood-destroying fungi.

Besides, the use of less suitable alternatives would require a significant increasing of active substance concentration in all biocidal products, therefore increasing the potential risk of exposure.

5. Availability

There are currently 2 potential alternatives to Propiconazole:

- Penflufen, which has recently been approved as Active Substance for PT8 – Wood Preservatives, but there is currently no biocidal product approved in any EU Member State that meet the requirements for the window & door industry (efficacy against discolouring fungi, wood-destroying fungi and approved for Use Class 3)
- Tebuconazole, which is currently used in some biocidal products within PT8, but which will reach its end of approval period before Propiconazole (September 31st, 2022). It is expected to also fall under the Exclusion Criteria of BPR Art. 5 (1), therefore facing the risk of not being re-approved.

As a conclusion, none of the 2 solutions can be considered as “available” in the current context of the BPR.

Research institutes (DK-SE-NO) are currently investigating further alternatives like modified wood to enable the direct use of home-grown wood species without the use of preservation. However, these research projects are currently at their preliminary stages and cannot be considered as alternatives for the time being.

6. Conclusion on suitability and availability of the alternative

As a conclusion, one can identify the below alternatives to the use of Propiconazole in Biocidal Products:

- Tebuconazole: although fewer biocidal products based on this substance are available in EU Member States, they usually present acceptable efficacy against biological attacks of wood.

The substance approval will however expire in September 2022, therefore not constituting a suitable alternative, even on the short term.

- Penflufen: although this substance could in theory become an acceptable alternative for some of the target organisms of Propiconazole, there are currently no biocidal products available in any EU Member States that meet the required criteria for the timber window and door industry (efficacy and Use Class 3)

- Alternative wood species: although some wood species can be considered as more durable than softwood species, these are either not source from the EU or are available in limited quantities. The mismatch between the resource and the demand would lead first to a significant increase in raw material prices, then to a potential material shortage on the European market.

Besides, these solutions are source from slow-growing species, making the sustainable management of European forestry more challenging.

- Modified wood: although some specific modified wood products might be suitable on a small scale, the available resources as well as the economic burden associated to these solutions prevent them from being used on a large scale by the entire timber window and door industry

Any other solution to Propiconazole-based biocidal products present a much lower efficacy, de-facto preventing from being used in the timber window and door industry.

7. Other comments

In addition to the above-mentioned arguments, we would like to highlight that the quality and durability requirements that apply to the window and door industry require time-consuming testing to ensure a long lifespan for our products.

Even with the assumption of new wood preservation solutions (assuming they are fully approved in EU Member States), the industry requires 5 to 10 years to run the necessary tests and approvals (e.g. aging, compatibility with coatings and paints, corrosion risks etc...).

This statement was highlighted by the Georg-August-Universität Göttingen (Wood Biology and Wood Products division), in a recent analysis sent to EuroWindowor (see attached Statement).

References

- CEIBois-EuroWindowor-SBS joint position on use of Propiconazole in wood preservatives (attached)
- Study HFA for Austria and Germany (attached)
- Study FCBA for France (attached)
- Study DHI Group for Denmark, Finland, Norway and Sweden (attached)
- Study SHR for Belgium and The Netherlands (attached)
- Statement on time-scheduling for the substitution of wood preservatives from Prof. Dr. Holger Militz and Prof. Dr. Christian Brischke, University of Goettingen (attached)
- Propiconazole Impact Assessment, Final Report, Risk & Policy Analysis, 2018-09-27



IV. Attachments

Non-confidential information

- CEIBois-EuroWindoor-SBS joint position on use of Propiconazole in wood preservatives (2021-08)
- Statement on time-scheduling for the substitution of wood preservatives from Prof. Dr. Holger Militz and Prof. Dr. Christian Brischke, University of Goettingen (13.07.2021)
- Study HFA (AT and DE)
- Study FCBA (FR)
- Study DHI Group (DK, FI, NO and SE)
- Study SHR (BE and NL)

Confidential information

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Submission successfully received (reference number 4463af26-7e47-46f4-ae6c-5dda63fcc21c).