

Biocidal Products Committee (BPC)

Opinion on the application for renewal of the active substance:

Cholecalciferol

Product type: 14

ECHA/BPC/412/2024

Adopted

27 February 2024

BPC
BIOCIDAL PRODUCTS
COMMITTEE

Opinion of the Biocidal Products Committee

on the renewal of the active substance Cholecalciferol for product type 14

In accordance with Article 14(3) of Regulation (EU) No 528/2012 of the European Parliament and of the Council 22 May 2012 concerning the making available on the market and use of biocidal products (BPR), the Biocidal Products Committee (BPC) has adopted this opinion on the application for renewal of approval in product type 14 of the following active substance:

Common name:	Cholecalciferol
Chemical name(s):	Vitamin D₃ (synonym)
EC No.:	200-673-2
CAS No.:	67-97-0

This document presents the opinion adopted by the BPC, having regard to the conclusions of the evaluating Competent Authority. The assessment report, as a supporting document to the opinion, contains the detailed grounds for the opinion.

Process for the adoption of BPC opinions

Following the submission of an application for renewal by BASF Agro B.V and Environmental Science FR S.A.S (previously Bayer SAS) on 22 December 2022, confirmed to be accepted by ECHA on February 7, 2023, the Swedish Chemicals Agency (evaluating Competent Authority) submitted an assessment report and the conclusions of its evaluation to ECHA on August 7, 2023, ECHA started the opinion forming phase on 16 December 2023. In order to review the assessment report and the conclusions of the evaluating Competent Authority, the Agency organised consultations via the BPC 50. Revisions agreed upon were presented and the assessment report and the conclusions were amended accordingly.

In the previous opinion it was concluded that cholecalciferol was a candidate for substitution.

For renewal, this conclusion is considered to remain and thus information on the fulfilment of the conditions for considering the active substance as a candidate for substitution was made publicly available on the ECHA web-site (at <https://echa.europa.eu/potential-candidates-for-substitution-previous-consultations>) on 08 September 2023 in accordance with the requirements of Article 10(3) of Regulation (EU) No 528/2012. Interested third parties were invited to submit relevant information by 07 November 2023.

Adoption of the BPC opinion

Rapporteur: Sweden

The BPC opinion on the renewal of approval of the active substance Cholecalciferol in product type 14 was adopted on 27 February 2024. The BPC opinion was adopted by consensus.

The BPC opinion takes into account the comments of interested third parties provided in accordance with Article 10(3) of Regulation (EU) No 528/2012.

The opinion is published on the ECHA webpage at:
<http://echa.europa.eu/regulations/biocidal-products-regulation/approval-of-active-substances/bpc-opinions-on-active-substance-approval>.

Detailed BPC opinion and background

1. Overall conclusion

The BPC opinion for the first approval concludes that since cholecalciferol is a pro-hormone and fulfils the exclusion criteria set in Article 5(1)(d) of Regulation (EU) No 528/2012 on the basis of the criteria defined in Regulation (EU) No 2017/2100, the overall conclusion of the BPC is that cholecalciferol should normally not be approved unless one of the conditions for derogation set in Article 5(2) of Regulation (EU) No 528/2012 is applicable. This conclusion remains for renewal of approval and the detailed grounds for the overall conclusion are described in the section "recommendation for renewal of approval" of the assessment report.

2. BPC Opinion

2.1. BPC Conclusions of the evaluation

a) Presentation of the active substance including the classification and labelling of the active substance

This evaluation covers the use of cholecalciferol (vitamin D₃) in product type 14.

The active substance is manufactured in compliance with the European Pharmacopoeia (Ph. Eur. 10.8). Reference sources have been established. The analytical methods required and available for the relevant matrices soil, water and body fluids and tissues are unchanged from the previous assessment.

The physico-chemical properties of the active substance have been evaluated and are deemed acceptable for the appropriate use, storage and transportation of the active substance.

A proposal for amended classification and labelling according to Regulation (EC) No 1272/2008 (CLP Regulation) was submitted to ECHA in January 2016. The CLH dossier was discussed during the 39th RAC meeting in December 2016. The amended classification and labelling for Cholecalciferol was agreed by RAC on 9 December 2016 (13th ATP):

Classification according to annex VI of the CLP Regulation	
Hazard Class and Category Codes	Acute Tox. 2 Acute Tox. 2 Acute Tox. 2 STOT RE 1
Labelling	
Pictogram codes	GHS06 GHS08
Signal Word	Danger
Hazard Statement Codes	H300 (fatal if swallowed) H310 (fatal in contact with skin) H330 (fatal if inhaled) H372 (causes damage to organs through prolonged or repeated exposure)
Specific Concentration limits, M-Factors	ATE oral: 35 mg/kg bw ATE dermal: 50 mg/kg bw ATE inhalation: 0,05 mg/L (dusts or mists) STOT RE 1; H372: $C \geq 3 \%$ STOT RE 2; H373: $0,3 \% \leq C < 3 \%$
Justification for the proposal	

For the first approval, it was concluded that cholecalciferol has endocrine disruptive (ED) properties for human health and environment and thus it meets the exclusion criterion in Article 5(1)(d) and it is a candidate for substitution in accordance with points (a) and (e) of Article 10(1) of the BPR. Nevertheless, cholecalciferol was considered to also fulfil the criterion for derogation under Article 5(2)(c): "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."

Consequently, cholecalciferol was approved as a rodenticide (PT 14) according to Commission Implementing Regulation EU/2019/637 on April 23, 2019, with date of inclusion July 1, 2019, and expiry date June 30, 2024.

Based on a comparative assessment of alternatives to anticoagulant rodenticides, also considering cholecalciferol, made by ECHA¹ and on the outcome of a public consultation on cholecalciferol as a potential candidate for substitution (see section 2.2.3), the conclusions from the previous assessment are still valid. This means that cholecalciferol is foreseen to be approved although risks for human health (endocrine disruptive properties) and the environment (endocrine disruption, primary and secondary poisoning) have been concluded.

Data on the active substance considered new for renewal (information on granulometry, four new published articles, aquatic acute toxicity (ongoing), exposure assessments revised according to updated guidance) would not change the key conclusions and are thus not foreseen to have any actual impact on the decision on renewal of approval of the active substance. No detailed assessment of the data was made since no added value was foreseen from such assessment as cholecalciferol is expected to be approved on the basis of Article 5(2)(c) regardless of whether the new data would identify any possible risk. The highest possible risk mitigation is already achieved since the general requirement to minimize exposure according to the last point of Article 5.2 applies, regardless of whether the new data would identify additional possible risks. Consequently, taking into account the circumstances for this substance, the eCA considered a limited assessment appropriate.

b) Intended use, target species and effectiveness

The representative use applied for and evaluated in the previous assessment is professional control of mice and rats in and around buildings. Cholecalciferol acts by hypervitaminosis, characterised by hypercalcemia.

No new efficacy data was provided for renewal of approval but sufficient efficacy data were provided for the first approval for *Rattus norvegicus* and house mouse (*Mus musculus*). Effectiveness was shown for two representative products containing 0.075% cholecalciferol. There is no known resistance to cholecalciferol and there is no evidence of cross-resistance to cholecalciferol. Data is considered sufficient to demonstrate the innate efficacy of the active substance and thus sufficient for the decision on renewal of approval.

According to the conditions for granting an authorisation of a biocidal product in Article 19(1)(b)(ii) of the Biocidal Products Regulation (EU) No 528/2012, products should be "sufficiently effective and have no unacceptable effects on the target organisms such as resistance, or, in the case of vertebrates, unnecessary suffering and pain". It is recognised that cholecalciferol does cause suffering for several days in rodents due to calcification of tissues and organs and can generally not be considered as a humane method to control rodents. Whether cholecalciferol causes less suffering than the anticoagulant rodenticides or non-chemical alternatives cannot be assessed based on existing data. However, due to

¹ Biocidal Products Committee (BPC) Opinion on a request according to Article 75(1)(g) of Regulation (EU) No 528/2012 on Questions relating to the comparative assessment of anticoagulant rodenticides, ECHA/BPC/386/2023

concerns about development of resistance against anticoagulant rodenticides there is a need for alternatives.

There are currently no new alternatives, chemical or non-chemical, that can be used as satisfactory alternatives to cholecalciferol with respect to efficacy in all types of infestation situations, the risk of secondary poisoning and the need for resistance management strategies.

In the context of the second renewal of all anticoagulant or anti-vitamin K (AVK) rodenticides in the EU, a comparative assessment was made by ECHA at the request of the European Commission². This assessment looked at chemical (including cholecalciferol) and non-chemical alternatives to anticoagulants and concluded that mechanical traps were suitable alternatives to anticoagulants for controlling indoor mice infestations, but their effectiveness is uncertain for other uses and target animals like rats. A public consultation regarding cholecalciferol as a potential candidate for substitution was also performed (see section 2.2.3).

c) Overall conclusion of the evaluation including need for risk management measures

Since there is no new data considered to change the conclusions made in the previous assessment, the conclusions from the previous assessment (below) remains:

Human health

Vitamin D is an essential vitamin needed for the control of calcium and phosphorous homeostasis in vertebrates. It is endogenously produced in skin from cholesterol during sun exposure and there is thus a physiological range that is well-tolerated by the human body. Several core studies and further tests investigating endocrine properties have been waived. This was accepted since human data available is yet considered sufficient to allow for an effects assessment and for the derivation of reference values, set to protect from elevated serum levels of calcium which is an effect of the endocrine mode of action. This was supported by an early BPC working group discussion in June 2014 and the CA meeting in September 2014. Cholecalciferol is acutely toxic via all routes and studies indicate that repeated exposure to the substance results in hypercalcemia in test animals as well as in humans. The reference values used for the risk assessment of professional and non-professional users (i.e. short-term, medium-term and long-term AELs) are derived from the tolerable upper intake level (UL) set by EFSA³ to protect from hypercalcemia in humans. The tolerable upper intake level represents the maximum level of total chronic daily intake of a nutrient (from all sources) judged to be unlikely to pose a risk of adverse health effects to humans. ULs may be derived for various lifestage groups in the population.

The table below summarises the exposure scenarios assessed.

² Biocidal Products Committee (BPC) Opinion on a request according to Article 75(1)(g) of Regulation (EU) No 528/2012 on Questions relating to the comparative assessment of anticoagulant rodenticides, ECHA/BPC/386/2023

³ EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA); Scientific Opinion on the Tolerable Upper Intake Level of vitamin D. EFSA Journal 2012;10(7):2813. [45 pp.]

<http://onlinelibrary.wiley.com/doi/10.2903/j.efsa.2012.2813/epdf>

Summary table: human health scenarios			
Scenario	Primary or secondary exposure and description of scenario	Exposed group	Conclusion
Application	Primary exposure, operator loading baitboxes and cleaning-up and disposing remaining bait from baitboxes. Tier 1 without gloves, rat and mouse treatment.	Professionals	acceptable
Indirect exposure	Secondary exposure, child gaining access to bait and ingesting bait. Product with aversive agent.	toddler	acceptable with RMM (aversive agent)

The estimated exposure of an operator handling the representative products in accordance with the intended uses is below the AEL and thus acceptable. However, the estimated exposure of toddlers accidentally ingesting bait is unacceptable unless the product contains an aversive agent.

Aggregated exposure

Aggregated or combined exposure, i.e., the sum of the estimated upper 95th percentile intake of vitamin D via food and food supplements and the operator exposure, is considered acceptable as it represents $\leq 35\%$ of the tolerable upper intake level (UL). This leaves a margin of $\geq 65\%$ of the upper limit for additional exposure resulting from endogenous production of cholecalciferol by sun exposure. For secondary exposure of children (toddlers, approximately 1 year old) the margin is lower but still around 50% of the upper limit.

Overall conclusion on human health risk characterization

Based on the assessment made, the intended rodenticide use of products containing cholecalciferol is not expected to present a risk to humans under the conditions outlined in this assessment. However, it should be particularly noted that a condition for acceptable use is that products contain an aversive agent and are placed in bait stations or in covered and protected bait points made unavailable for children.

Environment

With the proposed uses of cholecalciferol in and around buildings and given the special circumstances for cholecalciferol, a risk characterisation for the aquatic environment and for air is not considered necessary at the stage of renewal of approval although normally required. Exclusion criteria are already fulfilled, and the substance can only be approved by fulfilling criteria for derogation which includes that appropriate risk-mitigation measures should be taken to ensure that exposure of humans, animals and the environment is minimised.

A risk characterisation for the terrestrial compartment has been performed, with respect to the exposure of cholecalciferol to organisms via contaminated soil, directly through consumption (eating) of the product (primary poisoning) and indirectly via the terrestrial food chain (secondary poisoning). The risk to soil organisms is expected to be acceptable.

A qualitative assessment of acute primary poisoning as well as acute secondary poisoning via bait (primary) and poisoned rodents (secondary) showed that the estimated exposure (ETE and internal concentration, EC) to non-target animals is significantly below the LD₅₀ value for birds, whereas for mammals the estimated exposure is in the same range as the LD₅₀. Thus, birds are not likely to die from acute primary or secondary poisoning, whereas the situation for mammals indicates non-acceptable risks.

For the long-term primary poisoning and long-term secondary poisoning via poisoned rodents, as well as secondary poisoning via earthworms, a quantitative risk assessment was performed. This assessment indicated unacceptable risks, except for birds eating earthworms; for the latter scenario the risk was acceptable. The unacceptable risks to birds and mammals are a result of the endocrine disrupting the endocrine mechanism.

The table below summarises the exposure scenarios assessed.

Summary table: environment scenarios		
Scenario	Description of scenario including environmental compartments	Conclusion
Soil organisms	Exposure (PEC) of soil organisms (consumers, producers, decomposers) compared with PNEC _{soil}	Acceptable
Acute primary poisoning, birds	Bird eats bait	Acceptable
Acute primary poisoning, mammals	Mammal eats bait	Not acceptable
Acute secondary poisoning, birds	Bird eats poisoned rodent	Acceptable
Acute secondary poisoning, mammals	Mammal eats poisoned rodent	Not acceptable
Long-term primary poisoning: birds	Diet consisting largely of rodent baits or poisoned rodents	Not acceptable
Long-term primary poisoning: mammals	Diet consisting largely of rodent baits or poisoned rodents	Not acceptable
Long-term secondary poisoning via poisoned rodents – barn owl	Diet consisting largely of poisoned rodents	Not acceptable
Long-term secondary poisoning via poisoned rodents – weasel	Diet consisting largely of poisoned rodents	Not acceptable
Secondary poisoning via earthworms – birds	Bird eats earthworms which live in contaminated soil	Acceptable
Secondary poisoning via earthworms – mammals	Mammal eats earthworms which live in contaminated soil	Not acceptable

A long-term primary or secondary poisoning risk to birds and mammals cannot be excluded if assuming that their diet largely consists of rodenticide bait or poisoned rodents.

Overall conclusion for Human Health and Environment

Substances with the potential to cause endocrine disruption are generally assumed to lack threshold unless there is data clearly demonstrating a threshold for the key events in the endocrine mode of action. Therefore, it is usually not possible to perform a quantitative risk assessment for this type of substances. A clear threshold has not been identified for

cholecalciferol. However, since cholecalciferol is an endogenous substance with a physiologically tolerable range and the UL set by EFSA, based on elevated serum levels of calcium in humans, is used as the basis for the reference values derived under the BPR, any remaining uncertainty regarding exact threshold is considered acceptable. Therefore, a quantitative risk assessment of the intended use of the products leads to acceptable risks for human health as long as relevant risk mitigation measures are followed. For the environment however, unacceptable risks as a result of the endocrine disrupting the endocrine mechanism were identified related to primary and secondary poisoning of mammals and birds in the assessment for the first approval. If cholecalciferol is renewed, it has to be handled with great caution and all appropriate and available risk mitigation measures (RMMs) have to be applied to ensure that exposure is minimised.

2.2. Exclusion, substitution and POP criteria

2.2.1. Exclusion and substitution criteria

The table below summarises the relevant information with respect to the assessment of exclusion and substitution criteria:

Property		Conclusions	
CMR properties	Carcinogenicity (C)	No	Cholecalciferol does not fulfil criteria (a), (b) or (c) of Article 5(1).
	Mutagenicity (M)	No	
	Toxic for reproduction (R)	No	
PBT and vPvB properties	Persistent (P) or very Persistent (vP)	Not persistent	Cholecalciferol does not fulfil criterion (e) of Article 5(1)nor criterion (d) of Article 10(1).
	Bioaccumulative (B) or very Bioaccumulative (vB)	Not bioaccumulative	
	Toxic (T)	T	
Endocrine disrupting properties	Cholecalciferol is a pro-hormone and therefore fulfils the exclusion criteria in Article 5(1)(d) and (e) of Regulation (EU) No 528/2012 on the basis of having endocrine disrupting properties for both human health and the environment as defined in Regulation (EU) No 2017/2100.		
Respiratory sensitisation properties	No classification required. Cholecalciferol does not fulfil criterion (b) of Article 10(1).		
Concerns linked to critical effects	As there is a concern with respect to the occurrence of primary and secondary poisoning, even when applying restrictive risk management measures, cholecalciferol fulfils criterion (e) of Article 10.		
Proportion of non-active isomers or impurities	Cholecalciferol does not contain a significant proportion of non-active impurities. Cholecalciferol does not fulfil criterion (f) of Article 10(1).		

Consequently, the following is concluded:

RAC concluded that the data available for carcinogenicity may be indicative of a carcinogenic potential, but the strength of evidence is not enough to classify it as a carcinogen category 2, while for toxicity for reproduction the data are not sufficient for an accurate decision on classification⁴. Hence, no classification was proposed.

However, the eCA considered the available data package as sufficient for a sound risk-assessment and thus for decision making due to the following reasons:

1. There is a negligible risk from human exposure: The substance is endogenously produced and is essential for human health; hence, there is a physiological concentration range that is well-tolerated by humans. The exposure resulting from this biocidal use is not expected to contribute significantly to the vitamin D exposure from intake of food and supplements.
2. There is a need for effective rodenticides and there are already problems with resistance against several of the AK-rodenticides.
3. Animal welfare demands that every effort shall be made to avoid additional testing on vertebrates. Taking into account the specific properties and the intended use of cholecalciferol, the eCA considered that further testing was not justified, though the data package was not sufficient for the assessment of carcinogenicity and toxicity for reproduction. To establish an opinion about this issue, it was raised at the 57th CA-meeting. As a result, the member states agreed that no further vertebrate data should be requested for the time being to assess the C/M/R criteria.

Concerning the PBT-properties, an extensive discussion took place, both at the PBT-expert group in November 2016 and in the BPC WG-environment in January 2017. In both groups the discussion was followed up by a written consultation. The result in both groups was that a majority of the member states did not regard cholecalciferol as fulfilling the P-criterion for degradation in soil. Likewise, the B-criterion was not considered fulfilled by a majority of member states. Concerning the B-criterion, however, some member states questioned whether the criteria for bioaccumulation (as stipulated in Annex VIII of REACH) are at all applicable to substances which are actively regulated in the body.

Cholecalciferol is considered to meet the exclusion criteria with respect to endocrine disrupting properties laid down in Article 5(1)d of Regulation (EU) No 528/2012 and further defined in Regulation (EU) No 2017/2100.

Cholecalciferol is a pro-hormone metabolised into biologically active metabolites that together with parathyroid hormone are important for maintaining calcium and phosphorous homeostasis. Based on the results from toxicological studies, high dose (0.3 mg/kg bw/d in rats) administration of cholecalciferol causes hypercalcemia and tissue mineralisation in rats and in other vertebrate non-target organisms. Consequently, Cholecalciferol fulfils the criteria in section A and B of the Annex to Regulation (EU) No 2017/2100:

The substance alters the function of the endocrine system and causes an adverse effect as a consequence of its well understood endocrine mode of action in humans, in target and non-target organisms and is thus identified as an endocrine disruptor.

⁴ See minutes of the 39th meeting, available at https://echa.europa.eu/documents/10162/22838535/rac-39_minutes_en.pdf/293a400c-06dc-4db2-1399-8903a1a10bbc
 RAC Opinion, ref CLH-O-0000001412-86-144/F
 Available at <https://echa.europa.eu/documents/10162/fcc1958c-745f-ec68-eb38-17760e49af06>

Since there are no changes to the key conclusions made for the first approval the conclusions from the previous assessment are considered to remain, i.e., cholecalciferol fulfils the exclusion criterion set in Article 5(1)(d) of BPR.

Cholecalciferol meets the criterion (a) and (e) laid down in Article 10(1) of Regulation (EU) No 528/2012 and is therefore considered a candidate for substitution. The exclusion and substitution criteria were assessed in line with the "Note on the principles for taking decisions on the approval of active substances under the BPR" agreed at the 54th and 58th meeting of the representatives of Member States Competent Authorities for the implementation of Regulation 528/2012 concerning the making available on the market and use of biocidal products⁵. This implies that the assessment of the exclusion criteria is based on Article 5(1) and the assessment of substitution criteria is based on Article 10(1)(a, b, d, e and f).

2.2.2. POP criteria

Cholecalciferol is not considered to have the potential for long-range transport.

2.2.3. Public consultation for potential candidates for substitution

As cholecalciferol is considered a candidate for substitution, the decision on renewal of approval was preceded by a public consultation launched by ECHA in accordance with Article 10(3) of Regulation (EU) No 528/2012. The public consultation took place from 8 September 2023 to 7 November 2023.

A total of twelve comments were received from companies, independent individuals, an organisation, and a national body. Seven comments, two of these from the applicants, were not in favour of substitution whereas five comments were in favour of substitution, among these three comments referring to the same company and two from the German Environment Agency.

Several contributions stressed that cholecalciferol is needed as a complement and/or replacement for anti-vitamin K (AVK) rodenticides which is deemed necessary due to resistance problems. It is also pointed out that cholecalciferol has a more favourable toxicological and ecotoxicological profile (no CMR classification and not PBT) as compared to AVKs.

An expert from the German Environment Agency provided an assessment of non-chemical alternatives for the substitution of rodenticides for treatment of house mice. The comment was stated to be "not applicable for the control of Norway or black rats". The expert referred to a field study and an overview of rodent traps (confidential attachment) showing high efficacy of rodent traps. The expert also pointed out that rodent traps are more humane, killing the target animals directly whereas cholecalciferol cause the animals to die days after ingestion. Moreover, the direct kill by mechanical traps also prevents rodents from causing damage or pathogen transmission. Other comments claimed that non-chemical alternatives (mechanical traps) are not effective in controlling many infestations. The applicant referred to a different field study to evaluate the efficacy of a snap trap in house mouse control reporting 70 % control success and concluding that further field trials are required to improve our understanding of the potential and of limitations of using snap traps in house mouse control.

Three comments referred to a rodenticide under development (not yet on the market) claimed to show full efficacy upon multiple infestations and thus be an alternative to cholecalciferol.

⁵ See document: Note on the principles for taking decisions on the approval of active substances under the BPR (available from <https://circabc.europa.eu/d/a/workspace/SpacesStore/c41b4ad4-356c-4852-9512-62e72cc919df/CA-March14-Doc.4.1%20-%20Final%20-%20Principles%20for%20substance%20approval.doc>)

In conclusion, no comments received indicate that there are presently any suitable alternatives for the treatment of rats. However, the German Environment Agency emphasized that in a comparative assessment, non-chemical alternatives (traps) should be considered as an alternative to substitute the use of cholecalciferol for the treatment of house mice.

Many comments highlighted the advantage of cholecalciferol having a different mode of action compared to AVK rodenticides and a more advantageous toxicological and environmental profile. Based on the above, no better alternatives seem to be available at present for the intended uses of cholecalciferol except for indoor treatment of house mice which may possibly be substituted with mechanical traps.

2.3. BPC opinion on the application for approval of the active substance Cholecalciferol in product type 14

As the exclusion criteria are met, cholecalciferol should normally not be renewed unless one of the conditions for derogation set in Article 5(2) under the BPR is met.

The assessment of alternatives made by ECHA and the information provided in the public consultation of cholecalciferol as a potential candidate for substitution could not conclude that there are satisfactory alternatives with respect to efficacy in all types of infestation situations. Therefore, the conclusion on the conditions for derogation set out in Article 5(2)(c) is also considered to remain. However, a separate condition may be set for indoor treatment of house mice where substitution with mechanical traps may be possible.

If cholecalciferol is approved, the approval shall be subject to the conditions that were set for the first approval:

A. Generic conditions

1. Specification: minimum purity of the active substance evaluated: 970 g/kg. The active substance must comply with the European Pharmacopoeia (Ph. Eur. 7.0, now Ph. Eur. 10.8).
2. Cholecalciferol is considered a candidate for substitution in accordance with Article 10(1) (a) and (e) of Regulation (EU) No 528/2012.
3. The authorisation of biocidal products is subject to the following conditions:
 - a. The product assessment shall pay particular attention to the exposures, the risks and the efficacy linked to any uses covered by an application for authorisation, but not addressed in the Union level risk assessment of the active substance. In addition, pursuant to point 10 of Annex VI to Regulation (EU) No 528/2012, the product assessment shall include an evaluation as to whether the conditions of Article 5(2) of Regulation (EU) No 528/2012 can be satisfied.
 - b. Products shall only be authorised for use in Member States where at least one of the conditions set in Article 5 (2) of Regulation (EU) No 528/2012 is met.
 - c. Substance specific concentration limit: The nominal concentration of pure cholecalciferol in the products shall not exceed 0.075 % w/w.
 - d. Products shall contain an aversive agent and a dye.
 - e. Products shall not be authorised in the form of tracking powder.

- f. Products in the form of contact formulations, other than tracking powder, shall only be authorised for use by professionals indoors in places not accessible to children and non-target animals.
- g. Only ready-for-use products shall be authorised.
- h. Primary as well as secondary exposure of humans, non-target animals and the environment shall be minimised, by considering and applying all appropriate and available risk mitigation measures. These include, for example, the restriction to professional or trained professional use when possible and setting additional specific conditions per user category.
- i. Dead bodies and uneaten bait shall be disposed of in accordance with local requirements. The method of disposal shall be described specifically in the national SPC and be reflected on the product label.

B. Specific conditions per user category⁶

B.1. General public

The application for renewal of authorisation does not consider use by the general public (non-professionals) since the substance is concluded to be an endocrine disruptor.

B.2. Professional users

The authorisations of biocidal products are subject to the following conditions:

- a. Products shall not be authorised for use in sewage, open area or waste dumps.
- b. Products shall not be authorised for use as a permanent bait or pulse baiting treatments.
- c. Products shall only be authorised for use in tamper-resistant bait stations
- d. Persons making products for professional users available on the market shall make sure that these products are not supplied to the general public.

B.3. Trained professional users

The authorisations of biocidal products are subject to the following conditions:

- a. Products may be authorised for use in sewage, open area or waste dumps.
- b. Products may be authorised for use in covered and protected bait points as long as they provide the same level of protection for non-target species and humans as tamper-resistant bait stations.
- c. Products may only be authorised for use in permanent treatments at those sites with a high potential for reinvasion when other methods of control have proven insufficient.
- d. Products shall not be authorised for use in pulse baiting treatments.
- e. Persons making products for trained professional users available on the market shall make sure that the products are not supplied to other persons than trained professionals.

⁶ See CA-March16-Doc.5.4.a, that describes each user category.

Cholecalciferol gives rise to concern according to Article 28(2)(a) of Regulation (EU) No 528/2012. Therefore, cholecalciferol cannot be included in Annex I of Regulation (EU) 528/2012.

2.4. Elements to be taken into account when authorising products

1. The active substance Cholecalciferol is considered a candidate for substitution in accordance with Article 10(1)(e) of Regulation (EU) No 528/2012, and consequently a comparative assessment shall be carried out as part of the evaluation of an application for national authorisation.
2. The following recommendations and risk mitigation measures have been identified for the uses assessed. Authorities should consider these risk mitigation measures when authorising products, together with possible other risk mitigation measures, and decide whether these measures are applicable for the concerned product.
 - a. Products should not be used beyond 35 days without an evaluation of the state of the infestation and of the efficacy of the treatment.
 - b. In addition to the general requirement in Article 69 of Regulation (EU) No 528/2012, product information should include elements regarding:
 - i. Storage away from the reach of children and pets;
 - ii. Recommendation for the professional users regarding the frequency of revisiting the treated area;
 - iii. Recommendation to wear protective gloves and wash hands when removing dead bodies and uneaten bait.
 - c. It should be encouraged to set up training schemes in each member state to ensure that trained professionals are properly trained to use rodenticides.
 - d. Member states should encourage the application of Codes of Best Practices in rodent control. These Codes of Best Practices may include instructions for use regarding the planning, documentation, application and servicing as well as termination of a rodent control campaign.
 - e. For trained professionals the frequency of visits should be at the discretion of the operator, in the light of the survey conducted at the outset of the treatment.
 - f. Information should be available for professionals as well as non-professionals on non-chemical measures to prevent and control rodent infestations.
 - g. Trained professional users are required to carry out a pre-baiting survey of the infested area in order to determine the extent of the infestation.
 - h. Bait stations should be clearly labelled to show that they contain rodenticides (including product name, active substance and a contact phone number) and that they should not be moved.
 - i. When the product is being used in public areas, the areas treated should be marked during the treatment period and a notice explaining the risk of primary or secondary poisoning by the rodenticide as well as indicating the first measures to be taken in case of poisoning must be made available alongside the baits.

3. The risk for groundwater has to be assessed at product authorisation.

2.5. Requirement for further information

Sufficient data have been provided to verify the conclusions on the active substance, permitting the proposal on the renewal of approval of cholecalciferol.

It is also noted that there is a data gap on skin sensitisation due to inconclusive data. However, cholecalciferol fulfils criteria for exclusion in 5.1. (d) and (e) thus renewal of approval is based on criteria for derogation in article 5.2 (c) and appropriate risk-mitigation measures should be taken to ensure that exposure of humans, animals and the environment is minimised.