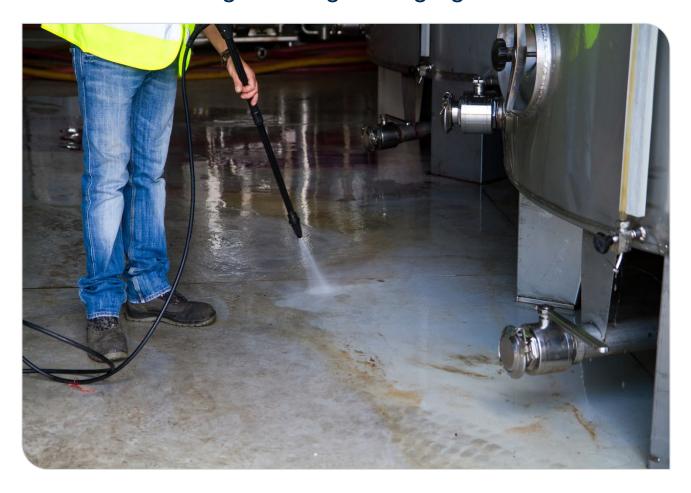
Consultation response for

Industrial cleaning and degreasing agents



Generation 4

17 June 2025



Nordic Swan Ecolabelled Industrial and degreasing agents – Consultation response $065/4.0,\,17\,\mathrm{June}~2025$

1		Summary	1
2		About the consultation	
3		2	
4		Comments to the criteria, in detail	
	4.1	General comments	
	4.2	Definition of the product group	7
	4.2.1	What can carry the Nordic Swan Ecolabel?	7
	4.3	Comments to the individual requirements	8
	4.3.1	Appendices	21
5		Discussion and conclusion	

1 Summary

The proposal for revised criteria for industrial cleaning and degreasing agents was submitted for stakeholder consultation between 22 January and 21 March 2025. The consultation generated 16 responses.

Many comments highlighted that surfactants classified as H412 are no longer exempt from the requirement concerning long-term environmental effects. Nordic Ecolabelling has not changed this requirement following the consultation but has clarified that the use of such surfactants is still permitted.

For a complete overview of the changes resulting from the consultation process and subsequent discussions, see Chapter 5: Discussion and Conclusion.

2 About the consultation

The proposal for revised criteria for Industrial cleaning and degreasing agents was submitted for stakeholder consultation between 22 January 2025 and 21 March 2025.

The consultation draft included the following proposed changes:

- The new EUH hazard classifications for endocrine disruptors, PBT/vPvB, and PMT/vPvM have been added to both the list of prohibited product classifications and the list of prohibited classifications for ingoing substances.
- Hazard classifications for specific target organ toxicity due to repeated exposure (STOT RE 1) and substances hazardous to the ozone layer have been added to the prohibited classifications for ingoing substances.
- The list of substances that are excluded from use in products has been extended, including microplastics.
- The requirements for potential or identified endocrine disruptors, nanomaterials/-particles, and PBT and vPvB substances have been updated.
- The definition of VOC has been updated according to the Industrial Emissions Directive (IED) 2010/75/EU.
- Surfactants classified as H411 and H412 are no longer exempt from the requirement on long-term environmental effects. Additionally, the multiplying factor M for H410, as described in the CLP Regulation (EC) No 1272/2008, has been included in the calculation.
- The CDV limit values have been tightened and the exemption for hydrochloric acid has been removed.
- A new requirement has been introduced for primary packaging up to 20 litres, ensuring recyclability.

In this compilation, all comments are collected and answered by Nordic Ecolabelling. The purpose is, in addition to collecting all comments, to show how external comments have affected the requirements. Nordic Ecolabelling is grateful for all the answers that help us in our development and help us to ensure that the work on the criteria complies with the ISO 14024 standard.

3 Compilation of received responses

The consultation generated 16 responses, distributed as follows.

Table 1: Compilation of responding organisations/companies

Denmark	Sweden	Finland	Norway	Iceland	International
DR.SCHNELL	PLS Produkter	KiiltoClean	Lilleborg		BASF SE
GmbH & Co.	AB		Solenis		
KGaA					
Miljøstyrelsen	Blue & Green				Zschimmer &
	AB				Schwarz
					Italiana
	Boverket				Lamberti
					S.p.A.
	MPE				CESIO
	International				(European
					Committee of
					Organic
					Surfactants
					and their
					Intermediates),
					a sector group
					of Cefic
	Svenska				European
	institutet för				Chemical
	standarder				Industry
					Council - Cefic
					aisbl
	AUWA-				
	Chemie GmbH				
	BPHR				

4 Comments to the criteria, in detail

4.1 General comments

BPHR

Vi ser positivt på att man öppnar upp för miljömärkning av fler produktgrupper, som t.ex. klotterborttagning för fordon och fasader utomhus. Detta har inte varit möjligt tidigare, bland annat beroende på att kriterierna har varit för strikta för att kunna miljömärka effektiva produkter inom produktgruppen. Vi menar att man bör undvika att sätta alltför hårda krav för en ny produktgrupp när den introduceras. Det är mer lämpligt att höja kraven successivt när man väl har sett att det är möjligt att erhålla en miljömärkning inom produktgruppen.

Blue & Green AB

Med hänsyn till att det tidigare inte har funnits några Svanenmärkta produkter för klotterborttagning, kan det antas att kriterierna har varit för strikta för att produkter med tillräcklig effekt ska kunna miljömärkas med Svanen.

Vi välkomnar att det öppnas upp för att tillåta produkter för klotterborttagning även för fordon, vilket inte var möjligt enligt tidigare kriterier. Det ger en möjlighet att erbjuda professionella fordonsvårdslösningar med ett komplett Svanenmärkt kemisortiment, inom transportsektorn.

Nordisk Miljömärkning

Tack för stödet.

PLS Produkter AB

This new proposal is very strict when it comes to industrial products. The industrial products are supposed to be a little bit "harsher" than the regular cleaning agents but with the new criteria it seems that you want industrial products to be more like 026 criteria for example.

Nordic Ecolabelling

Thank you for your comment. Following the consultation, the CDV limit values have been increased for some product types. For the remaining product types, license data indicates that the proposed limit values are sufficient.

BASF SE

The changes in the new criteria are considered critical. The removal of high-performing, low-foaming surfactants from formulations—due to the loss of the H412 exemption (refer to O10)—forces manufacturers to use weaker surfactants as substitutes. As a result, the quantity of these less effective surfactants must be increased to achieve similar performance levels. Furthermore, the reduction in CDV values significantly lowers the overall effectiveness of the detergents, especially considering the previously mentioned change concerning the H412 surfactant exemption. This situation poses considerable challenges for industrial applications, where optimal dosage and performance are essential.

Sustainability:

BASF was surprised to see that there are no comments/requirements regarding sustainability. We would like to recommend the following addition: "For ingredients where a C14-traceable renewable carbon approach is not currently feasible, attributed renewable carbon via a certified mass balance approach (e.g., REDcert2, ISCC+) will be accepted as a transitional solution."

Nordic Ecolabelling

Thank you for your comment. Surfactants classified as H412 are no longer exempt from the requirement; however, their use is still permitted. To accommodate the presence of such surfactants in products, the limit value has been adjusted – from 1% to 40 grams per litre in-use solution (10 for CIP products). This revised approach aims to align the requirement with other Nordic Swan Ecolabel criteria for chemical-technical products, while avoiding a general tightening of the overall requirement.

Following the consultation, the CDV limit values have been increased for some product types. For the remaining product types, license data indicates that the proposed limit values are sufficient.

Regarding raw material sustainability, this is a broader issue that needs to be addressed at a general level across all chemical-technical product groups. The comment has been forwarded to our expert group responsible for raw material requirements.

Zschimmer & Schwarz Italiana

Zschimmer & Schwarz is committed to the safe and sustainable use of our products and recognise the importance of ensuring their safety and environmental sustainability on the market. With this in mind, we are concerned about several changes being proposed in the new Nordic Swan criteria for industrial cleaning and degreasing agents, which would exclude high performance surfactants that are classified H412 above a specific concentration, even though they meet strict rules regarding biodegradability. In our view, such a prohibition is not justified and would cause a narrowing of options for formulators to select surfactants and develop innovative formulations leading to negative repercussions for product performance and the environment.

We are also concerned that the requirements regarding anaerobic biodegradability are overly stringent in the absence of suitable testing methods and better assessment of true risk, and can be challenging for key surfactants without providing accompanying environmental benefits. At a minimum, we feel that other relevant testing methods should also be included in the DID list part B, such as the AnBUSDIC test as an equivalent test method for anaerobic biodegradability, but also other approaches (e.g Read Across, QSAR, literature data and so on).

We also take this opportunity to highlight the recent development by CESIO of a guidance document on how to use the definition of surfactant in practice. It should be noted that the current definition of the EU Detergents Regulation (which is referred to on p11 and p48 of the Nordic consultation document version 4.0), is difficult to apply in practice. Therefore, with this CESIO guidance we hope to create some common understanding on the testing methods and phys-chem criteria which can be applied to identify a surfactant within the confines of the current definitions.

With these comments in mind, we hope that Nordic Ecolabel will reinstate the acceptance of an exemption for H412 surfactants over the limits assigned, reconsider its approach regarding the stringent applicability of anaerobic testing methods with improved consideration of true risk, and consider other practical considerations and applicability of testing methods when defining and assessing surfactants used in Industrial cleaning and degreasing agents.

Lamberti S.p.A.

We are fully committed to the safe and sustainable use of our products and recognise the importance of ensuring their safety and environmental sustainability on the market, nevertheless some comments are necessary.

We are concerned about several changes being proposed in the new Nordic Swan criteria for industrial cleaning and degreasing agents, which would exclude high performance surfactants that are classified H412 above a specific concentration, even though they meet strict rules regarding biodegradability. In our view, such a prohibition is not absolutely justified and would cause a narrowing of options for formulators to select surfactants and develop innovative formulations leading to negative repercussions for product performance and the environment.

We are also concerned that the requirements regarding anaerobic biodegradability are overly stringent in the absence of suitable testing methods and better assessment of true risk, and can be challenging for key surfactants without providing accompanying environmental benefits. At a minimum, we feel that other relevant testing methods should also be included in the DID list part B, such as the AnBUSDIC test as an equivalent test method for anaerobic biodegradability, but also other approaches (e.g Read Across, QSAR, literature data and so on)

We also take this opportunity to highlight the recent development by CESIO of a guidance document on how to use the definition of surfactant in practice which is follow by industrial sectors in general. It should be noted that the current definition of the EU Detergents Regulation (which is referred to on p11 and p48 of the Nordic consultation document version 4.0), is difficult to apply in practice.

Therefore, with this CESIO guidance we hope to create some common understanding on the testing methods and phys-chem criteria which can be applied to identify a surfactant within the confines of the current definitions.

Conclusion:

With these comments in mind, we hope that Nordic Ecolabel will reinstate the acceptance of an exemption for H412 surfactants over the limits assigned, reconsider its approach regarding the stringent applicability of anaerobic testing methods with improved consideration of true risk, and consider other practical considerations and applicability of testing methods when defining and assessing surfactants used in Industrial cleaning and degreasing agents.

We stand available to provide any further input necessary for this consultation. Therefore, please do not hesitate to contact us in the context of the on-going revision process, in case you would like any further input or clarification.

CESIO (European Committee of Organic Surfactants and their Intermediates), a sector group of Cefic

CESIO, the European Committee of Organic Surfactants and their Intermediates[1], which is a sector group of Cefic that represents manufacturers and suppliers of surfactants in the EU, has reviewed the public consultation on the Nordic Ecolabel for industrial cleaning and detergent agents. CESIO and its members would like to highlight the following comments in its response to this consultation. As a responsible industrial sector, we are committed to the safe and sustainable use of our products and recognise the importance of ensuring their safety and environmental sustainability on the market. With this in mind, we are concerned about several changes being proposed in the new Nordic Swan criteria for industrial cleaning and degreasing agents , which would exclude high performance surfactants that are classified H412 above a specific concentration, even though they meet strict rules regarding biodegradability. In our view, such a prohibition is not justified and would cause a narrowing of options for formulators to select surfactants and develop innovative formulations leading to negative repercussions for product performance and the environment.

CESIO members are also concerned that the requirements regarding anaerobic biodegradability are overly stringent in the absence of suitable testing methods and better assessment of true risk, and can be challenging for key surfactants without providing accompanying environmental benefits. At a minimum, we feel that other relevant testing methods should also be included in the DID list part B, such as the AnBUSDIC test as an equivalent test method for anaerobic biodegradability, but also other approaches (e.g Read Across, QSAR, literature data and so on).

We also take this opportunity to highlight the recent development by CESIO of a guidance document on how to use the definition of surfactant in practice (See guidance available on our website here: https://www.cesio.eu/index.php/information-centre/document-library/guidelines). It should be noted that the current definition of the EU Detergents Regulation (which is referred to on p11 and p48 of the Nordic consultation document version 4.0), is difficult to apply in practice. Therefore, with this CESIO guidance we hope to create some common understanding on the testing methods and phys-chem criteria which can be applied to identify a surfactant within the confines of the current definitions.

Conclusion:

With these comments in mind, we hope that Nordic Ecolabel will reinstate the acceptance of an exemption for H412 surfactants over the limits assigned, reconsider its approach regarding the stringent applicability of anaerobic testing methods with improved consideration of true risk, and consider other practical considerations and applicability of testing methods when defining and assessing surfactants used in Industrial cleaning and degreasing agents.

CESIO stands available to provide any further input necessary for this consultation. Therefore, please do not hesitate to contact us in the context of the on-going revision process, in case you would like any further input or clarification.

Nordic Ecolabelling

Thank you for your comment.

Surfactants classified as H412 are no longer exempt from the requirement; however, their use is still permitted. To accommodate the presence of such surfactants in products, the limit value has been adjusted (before consultation) – from 1% to 40 grams per litre in-use solution (10 for CIP products). This revised approach aims to align the requirement with other Nordic Swan Ecolabel criteria for chemical-technical products, while avoiding a general tightening of the overall requirement.

Nordic Ecolabelling has evaluated and concluded not to accept the AnBUSDiC method. Our decision is based on publications as well as advice obtained from a 3rd party assessment of the method compared to ECETOC, ISO 11734 and OECD 311. Read-across is already permitted, as stated in Part B of the DID list.

Thank you for bringing the new CESIO guidance on the surfactant definition to our attention. Hopefully, it can also help to identify the surfactants used in ecolabelled products.

4.2 Definition of the product group

4.2.1 What can carry the Nordic Swan Ecolabel?

DR.SCHNELL GmbH & Co. KGaA

We kindly request that "cleaners for solar modules" be considered as a new subgroup within the criteria. As solar systems will play an increasingly important role in the green transformation and in general electricity generation, their maintenance will also be crucial, leading to potentially high demand for such products.

Dirty solar modules exhibit significantly reduced performance. Therefore, at least annual cleaning is highly advisable. Additionally, the lifespan of solar modules can be optimized with gentle cleaning agents.

Currently available products on the market rely on inexpensive raw materials, often neglecting environmental toxicological aspects. Our analysis has highlighted particularly aquatic-toxic surfactants and non-biodegradable ingredients such as polymers.

In our opinion, this product group would fit well within the criteria of "Industrial cleaning and degreasing agents," as it is a very specialized application aimed at the professional sector. The description from point 2 of the consultation proposal would also apply to these products. We do not see any conflict with the product group "Cleaning products 026." Similar to other products in the new PG "Industrial cleaning and degreasing agents," "cleaners for solar modules" would be highly specialized products.

The criteria for such a product subgroup should include strict environmental limits for the raw materials used. Logically, these cleaners should not intentionally be released into the environment, but realistically, some degree of release during application is inevitable. Therefore, we see the importance of providing the market with product alternatives that could be certified with the Nordic Swan Ecolabel, ensuring a high standard of ecological safety and functionality in their application.

Nordic Ecolabelling

Thank you for your comment. Cleaners for solar modules have now been included as a separate subgroup within the product group. These products must comply with all requirements outlined in the criteria document. In addition, they are subject to a specific CVD limit value of 20,000. Furthermore, the use of organic substances that are aerobically non-biodegradable (aNBO) is not permitted.

Miljøstyrelsen

Produkter tilsat <u>parfume</u> kan ikke svanemærkes som industrielt rengøringsmiddel (kriterium O9). Dette kan med fordel også præciseres indledningsvist i Kap. 2 i produktgruppedefinitionen: *An Industrial cleaning and degreasing agents carrying the Nordic Swan label cannot contain fragrances/perfumes.*

Desinficerende produkter kan ikke svanemærkes, som beskrevet i produktgruppedefinitionen side 5 øverst (udledt af biocidproduktforordningens art. 69 og 72). Nordisk Miljømærkning kan med fordel præcisere i produktgruppedefinitionen (side 5), at et svanemærket industrielt rengørings- eller affedtningsmiddel ikke må markedsføres/anprises med desinficerende, mikrobiel eller lignede effekter.

Kap. 4: Bullet 3: PvBv rettes til vPvB.

Nordic Ecolabelling

Thank you for your comment. Regarding perfume, we do not specify it in the product group definition, as it is not typically used in this type of products.

We have added the following sentence to the product group definition: Nordic Swan Ecolabelled products within this product group must not claim biocidal, disinfectant, or antimicrobial effects.

PvBv has been corrected to vPvB.

4.3 Comments to the individual requirements

O1 Description of the product

DR.SCHNELL GmbH & Co. KGaA

The application area "Effectively remove oil, grease and dirt" should be extended to include "graffiti paints" for completeness:

"Effectively remove oil, grease and dirt or graffiti paint"

Nordic Ecolabelling

Thank you for your comment. We have updated the USP about application area according to your suggestion. We have also updated the product group definition with graffiti paint.

O2 Classification of the product

No consultation comments.

O3 Classification of ingoing substances

Miljøstyrelsen

Enzymer er undtaget krav til kemiske stoffers klassificering, da de ifølge baggrundsteksten ikke eksisterer som frit enzymstøv i det færdige produkt, og dermed ikke forventes, at forårsage allergi hos forbrugere.

Er der mon konkrete undersøgelser, der bekræfter dette i tilfælde hvor enzymet er på fast form?

Hvis det spraytørrede enzym fra producentens side er kapslet ind i en beskyttende coat, kunne man forestille sig, at slitage under håndtering, transport osv. kunne ødelægge coaten er dermed tilgængeliggøre enzymstøv i forbindelse med slutanvendelsen. Hvis ikke undtagelsen er baseret på data, kunne man overveje, at indføre krav om jævnlige tests af det færdige produkt fsva. frit tilgængeligt enzymstøv, da stabiliseringen og coatningen af enzymgranulat formodentlig kan variere i kvalitet og effektivitet.

Ydermere kunne man overveje, at stille krav om at flydende rengøringsmidler med enzymer ikke må anvendes på en måde, så der er risiko for inhalation af enzymholdige aerosoler via eksempelvis spray eller skumudlægning.

Nordic Ecolabelling

Thank you for the comment. After closer contact with the industry, it appears that enzymes are not particularly relevant for this product group. We have therefore removed the exemption for enzymes.

O4 Surfactants

BASF SE

The OECD 311 test is for 'organic compounds', but testing for surfactants based on a simple pass-fail screening test is not that simple. Therefore, BASF would like to propose the AnBUSDiC tests as an additional test method as an example of an equivalent test method for anaerobic degradation. This test is particularly relevant for surfactants, which in Europe are almost exclusively disposed via municipal sewage treatment plants with an anaerobic cleaning stage, since anaerobic degradation is tested under sewage treatment plant conditions. AnBUSDiC-Test is particularly suitable for new, innovative surfactants for which natural adaptation has not yet taken place. In addition, the AnBUSDiC test is quick to perform and cost-effective.

Definition surfactant:

Nordic Swan definition:

"Any organic substance, which has surface-active properties, and which consists of one or more hydrophilic and one or more hydrophobic groups of such a nature and

size that it is capable of reducing the surface tension of water."

BASF Feedback:

In our view the surfactant definition from Nordic Swan is lacking sufficient specificity and is therefore not practicable. The complexity of the surfactant properties has been explained in a recently published guideline by CESIO: file Additionally, we emphasize the importance of a harmonized criteria defining of surfactants between all European legislation and therefore suggest adopting the definition of the Detergent Regulation rather than presenting a separate definition within the framework of the Nordic Swan criteria.

Nordic Ecolabelling

Thank you for your comment.

Nordic Ecolabelling has evaluated and concluded not to accept the AnBUSDiC method. Our decision is based on publications as well as advice obtained from a 3rd party assessment of the method compared to ECETOC, ISO 11734 and OECD 311. Read-across is already permitted, as stated in Part B of the DID list.

We have decided to remove the special Nordic Swan Ecolabel definition of surfactants from the requirement. Thank you for bringing the new CESIO guidance on the surfactant definition to our attention. Hopefully, it can also help to identify the surfactants used in ecolabelled products.

MPE International

The requirement for anaerobic biodegradability should only be for non-water soluble surfactants. For completely water soluble surfactants there is very low likelihood of entrapment in sludge and they will biodegrade when released.

Exclusion of water soluble and non-anaerobically biodegradable surfactants is contra productive and sometimes require use of less effective and thus higher levels of non-optimal substances.

Nordic Ecolabelling

Thank you for your comment. Water solubility is not a guarantee that a substance is anaerobically biodegradable. For example, there are surfactants that are water-soluble but not anaerobically biodegradable. Moreover, our chemical requirements are hazard-based, not risk-based.

Zschimmer & Schwarz Italiana

CESIO developed of a guidance document on how to use the definition of surfactant in practice. It should be noted that the current definition of the EU Detergents Regulation (which is referred to on p11 and p48 of the Nordic consultation document version 4.0), is difficult to apply in practice. Therefore, with this CESIO guidance we hope to create some common understanding on the testing methods and phys-chem criteria which can be applied to identify a surfactant within the confines of the current definitions.

Lamberti S.p.A.

CESIO developed of a guidance document (see link to guidance here) on how to use the definition of surfactant in practice.

It should be noted that the current definition of the EU Detergents Regulation

(which is referred to on p11 and p48 of the Nordic consultation document version 4.0), is difficult to apply in practice. Therefore, with this CESIO guidance we hope to create some common understanding on the testing methods and phys-chem criteria which can be applied to identify a surfactant within the confines of the current definitions.

CESIO (European Committee of Organic Surfactants and their Intermediates), a sector group of Cefic

CESIO developed of a guidance document (see link to guidance on the CESIO website here: https://www.cesio.eu/index.php/information-centre/document-library/guidelines) on how to use the definition of surfactant in practice. It should be noted that the current definition of the EU Detergents Regulation (which is referred to on p11 and p48 of the Nordic consultation document version 4.0), is difficult to apply in practice. Therefore, with this CESIO guidance we hope to create some common understanding on the testing methods and phys-chem criteria which can be applied to identify a surfactant within the confines of the current definitions.

Nordic Ecolabelling

Thank you for bringing the new CESIO guidance on the surfactant definition to our attention. Hopefully, it can also help to identify the surfactants used in ecolabelled products.

O5 Preservatives

Miljøstyrelsen

Under kriterie O3 er indholdsstoffer som er klassificeret Skin Sens 1, 1A eller 1B undtaget, hvis de anvendes som konserveringsmiddel og har et indhold på mindre end 0,01 % (w/w) i produktet. De mest potente konserveringsstoffer er undtaget i kriterie O9.

Miljøstyrelsen gør opmærksom på at anvendelse af konserveringsmidler klassificeret som Skin Sens. helt bør frarådes, og det er Miljøstyrelsens opfattelse, at der findes godkendte konserveringsmidler som ikke har denne klassificering.

Som en aflægger af høringen bør Nordisk Miljømærkning undersøge og så vidt muligt i baggrundsafsnittet uddybe, hvorfor de ikke-sensibiliserende konserveringsmidler er utilstrækkelige til at opnå en konserverende effekt i svanemærkede industrielle rengøringsmidler.

(MST kan primært pege på sammensætningskompatibilitet mv, men så bør det fremgå).

Nordisk Miljömärkning

Tack för kommentaren. Vi har utrett frågan vidare och kommit fram till att konserveringsmedel med sensibiliserande egenskaper bör kunna undvikas helt inom denna produktgrupp. Undantaget har därför tagits bort från krav O3.

O6 Organic colorants

Miljøstyrelsen

Som udgangspunkt bør tilsætning af kemiske stoffer, som kun har en visuel/æstetisk funktion i produktet, undgås. Man kan overveje at indføre krav om at, producenten af industrielle rengørings- og affedtningsmidler skal redegøre for hvordan evt. tilsat farvestof til disse produkter har en sikkerhedsmæssig funktion.

Nordic Ecolabelling

As a general principle, we do not assess the necessity of each individual ingredient in a product, but rather evaluate the product's overall environmental impact. The addition of colour may, in some cases, help prevent overdosing on surfaces, and thereby reduce the product's environmental impact during use.

O7 Volatile organic compounds (VOC)

AUWA-Chemie GmbH

Why don't you use the same VOC criteria as Boat and Car Care cleaning criteria (065)? There we calculate with POCP calculation. We've got one product that is good for Car Care cleaning, but not for Industrial cleaning with a limit of 1 % VOC in the product.

Nordic Ecolabelling

Thank you for your comment. The use of POCP factors for VOC assessment can, to some extent, be considered outdated or at least limited in its applicability. A significant number of VOC substances lack calculated POCP values, which necessitates the use of generic or default values. This reduces the accuracy of the assessment and can result in misleading estimations, particularly when the composition of the VOC emissions is not well known. For these reasons, Nordic Ecolabelling does not wish to introduce POCP calculations in these criteria. Furthermore, the criteria for Care products for vehicles will soon be evaluated and subsequently revised.

MPE International

How do you distinguish organic solvents from organic compounds and why would there be a distinction on vapor pressure limit?

Nordic Ecolabelling

Thank you for your comment. Organic solvents are a subset of organic compounds that are specifically added for their ability to dissolve or clean materials, such as ethanol, acetone, and isopropanol. In contrast, organic compounds include all carbon-based chemicals, even those not intended to act as solvents, like fragrances and preservatives. The reason for the different vapor pressure limits is related to their impact: the 2.5 kPa limit for organic solvents is designed to reduce evaporation rates for safety and handling purposes, while the 0.01 kPa limit for organic compounds focuses on air quality and environmental protection. This distinction helps to manage both workplace safety and long-term emissions in the best way possible.

08 Phosphorus

MPE International

Why have an exception for phosphorus in offshore products? Not necessary from a technical point of view since fully functional alternatives exist. In particular for off shore use phosphorus should not be allowed.

Nordic Ecolabelling

Thank you for your comment. The exemption for phosphorus applies exclusively to offshore products that are not used in coastal areas. These products must comply with the requirements of OSPAR (the Oslo and Paris Conventions for the Protection of the Marine Environment of the North-East Atlantic). To our knowledge, suitable alternatives to phosphates are not currently registered with OSPAR, which does not accept data from ECHA.

O9 Excluded substances

BASF SE

While we do not question the exclusion of the complexing agents EDTA, DTPA and NTA, it is in our opinion essential that the explanation reflects the current science: the rational given below are partially incorrect. BASF suggest some minor corrections; Please see corrections in red.

Ethylenediamine tetraacetate (EDTA, CAS No. 6381-92-6) and its salts and Diethylenetriamine pentaacetate (DTPA, CAS No. 67-43-6) and its salts

EDTA, DTPA and their salts are not readily degradable. Furthermore, they are both DTPA is classified toxic for reproduction and may potentially pose a risk to consumers*. For EDTA, the EU's risk assessment states that under the conditions at municipal water treatment plants EDTA is either not broken down or only breaks down to a slight degree. To-date in Europe, EDTA has been replaced in virtually all consumer products by readily biodegradable alternatives such as MGDA (methylglycine diacetic acid) and GLDA (glutamic acid diacetic acid). The requirement is unchanged compared to criteria generation 3.

* It is correct that DTPA is classified as reprotoxic to reproduction, but a risk for consumers in detergents is not established, effect levels being far too high to be realistic. This classification does not apply to EDTA. Based on available studies on EDTA's, no adverse effects were found that would trigger a classification as reprotoxic. * A JRC report published in 2004 states: "We do not recommend classifying EDTA/Na4EDTA as being a reproductive toxicant due to the following reasons: i) the malformations have been demonstrated at relatively high oral dose levels and ii) a steep dose response relationship can be assumed. No oral NOAEL for either developmental toxicity or maternal toxicity could be established". Also, the EU risk assessment does not conclude that such as classification would be justified. Only the lower biodegradability of EDTA may justify its exclusion in formulations with ecolabels.

NTA (nitrilotriacetic acid, CAS-no. 139-13-9) and its salts

NTA is classified as Carc cat. 2 (EU, 2008b) and is thus already prohibited in requirement O4 due to its classification. However, the carcinogenic effect is low and a specific concentration (SCL) of 5% for classification was added in the CLP*. The complexing agents that replace NTA, EDTA and DTPA (GLDA and MGDA) contain small quantities of NTA as residues from raw material production (as attested in various safety data sheets for the raw materials). To encourage a transition to MGDA and GLDA, they may contain NTA impurities in the raw material in concentrations of less than 0.2% if the concentration of NTA in the product is below 0.1%. This is a new requirement in generation 4 of the criteria. *Annex VI of Regulation (EC) No 1272/2008 for EC 225-768-6 (trisodium salt).

Nordic Ecolabelling

Thank you for your comment.

We agree with the proposed changes to the text regarding EDTA/DTPA, but we do not wish to include the additional suggested wording.

We do not agree with your proposed revisions concerning NTA, as we do not find it appropriate to describe the cancer risk as "graduated" – in our view, even a small risk is serious.

BPHR

Vi anser att samma definition och undantag för avaromatiserade naftor ska införas, i enlighet med definition och undantag som finns i kriterierna för fordonsrengöring. I kriterierna för produkter för fordonsrengöring medges ett undantag för avaromatiserade naftor (aromhalt under 5000 ppm) vid användning i exempelvis kallavfettning. "Undantag: Lösningsmedel i kallavfettning, mikroemulsioner och avrinningsmedel får innehålla \leq 5000 ppm aromatiska kolväten som rest från renings-/raffineringsprocessen." Detta anser vi bör införas i kriterierna för industriella rengörings- och avfettningsmedel.

Blue & Green

Samma definition och undantag bör gälla för avaromatiserade naftor som för produktgruppen för fordonsvård (013). Det kan vara så att avaromatiserade naftor används, och i kriterierna för produkter för fordonsrengöring (013) finns det ett undantag som tillåter användning om aromathalten är under 5000 ppm.

Nordisk Miljömärkning

Tack för kommentaren. Vi har infört samma undantag som i PG 013 för klotterborttagare: "Solvents in graffiti removers may contain ≤ 5000 ppm aromatic hydrocarbons as a result of the purification / refining process."

European Chemical Industry Council - Cefic aisbl

We would like to base our arguments on our <u>statement</u> shared in November 2024, also attached to this email. This statement was elaborated in response to a recent publication of the University of Tübingen that concluded that industrial aminophosphonates, especially DTPMP used in detergents, contribute to the occurrence of glyphosate in the environment. Phosphonates Europe supports any efforts to identify the origins of glyphosate in the environment and intends to play an

active role in this process. As such, there are some concerns we would like to address:

- In wastewater treatment plants, glyphosate and AMPA strongly attach to the sludge, rather than degrade into discharge waters.
- The Tübingen University study 'Glyphosate contamination in European rivers not from herbicide application?'
 - o does not consider the impact of the hardness of the water
 - does not seek to validate the mass balance between the levels of DTPMP used in EU detergents and the glyphosate and AMPA levels in surface waters.
- The Tübingen University study 'Glyphosate is a transformation product of a widely used aminopolyphosphonate complexing agent' is conducted under largely artificial experimental conditions, significantly deviating from natural conditions.
- In addition to industrial agriculture, other sources of glyphosate, such as urban applications, are well documented.
- The levels addressed are below the recommended limits, and are considered safe for human health and the environment.

In addition, a <u>recent comment</u> was published by Tolkamp and Hofman-Caris, that also mitigates Schwientek et al. Arguments and conclusions. We would deeply appreciate that this document is also considered in your argumentary. Phosphonates Europe is very much concerned that the right elements are taken into account, and we hope that these valid arguments will be considered.

Nordic Ecolabelling

Thank you for your comment. In Water Research 1 October 2024 there is the following concern: "As they are used in laundry detergents in Europe, but not in the USA, we hypothesize that glyphosate may also be a transformation product of aminopolyphosphonates." Nordic Ecolabelling wants to exclude or limit certain substances that are suspected of having undesirable properties, by use of the precautionary principle. We therefore maintain the ban for this substance.

Miljøstyrelsen

Bemærk, at polycarboxylater i fast form også kan falde under definitionen for mikroplast som angivet i REACH bilag XVII, indgang 78, og dermed være omfattet restriktionens markedsføringsforbud fra 17. oktober 2028.

Bemærk, at CAS-nummeret for C(M)IT/MIT (3:1) er 55965-84-9 og ikke 26172-55-4, som angivet.

Nordisk Miljömärkning

Takk for kommentaren. Angående polykarboksylater, se vårt svar nedenfor til MPE International.

Vi har uppdaterat till korrekt CAS-nummer för C(M)IT/MIT (3:1).

MPE International

Regarding microplastics. Why have you made a general exemption for Polycarboxylates and not only for water soluble? There is not rationale whatsoever for relieving polycarboxylates from the microplastics requirements.

Nordic Ecolabelling

Thank you for your comment. We have removed the exemption for polycaroboxylates. There are water soluble alternatives not defined as microplastics (due to the new definition).

O10 Long-term environmental effects

KiiltoClean

The calculation sheet is not too strict on the products regarding environmental hazard classes' considerations in the calculations.

Nordic Ecolabelling

Thank you for the feedback.

PLS Produkter AB

Adding H412 for surfactants is going to be complicated because H412 is the best classification that you can have for a surfactant and the most surfactants has this classification which makes it harder to modify the products.

Zschimmer & Schwarz Italiana

Although research goes in the direction of developing less chronically toxic (i.e. non-H411 or H412 classified) surfactants, most of the high-performance surfactants available on the market today are at least classified with H412 and no sufficient alternatives with equivalent performance are yet available. This is especially true since LABSA/LAS (linear benzene sulfonic acid) components were forbidden some years ago, which was one of the most important surfactant groups for laundry detergents. In the current environment this restriction would lead to a poorer performance product. This would likely result in a higher consumption of surfactants not H412 with a very negative influence on sustainability. Especially effected are high-performance surfactants, both non-ionics and anionics, such as fatty alcohol ethoxylates; fatty alcohol ether sulfates and fatty alcohol sulfates. The introduction of limitation of H412 surfactants above specific concentration (very low) should be reconsidered.

Lamberti S.p.A.

Although research goes in the direction of developing less chronically toxic (i.e. non-H411 or H412 classified) surfactants, most of the high-performance surfactants available on the market today are at least classified with H412 and no sufficient alternatives with equivalent performance are yet available. This is especially true since LABSA/LAS (linear benzene sulfonic acid) components were forbidden some years ago, which was one of the most important surfactant groups for laundry detergents. In the current environment this restriction would lead to a poorer performance product. This would likely result in a higher consumption of surfactants not H412 with a very negative influence on sustainability. Especially effected are high-performance surfactants, both non-ionics and anionics, such as fatty alcohol ethoxylates; fatty alcohol ether sulfates and fatty alcohol sulfates. The introduction of limitation of H412 surfactants above specific concentration (very low) should be reconsidered.

CESIO (European Committee of Organic Surfactants and their Intermediates), a sector group of Cefic

Although research goes in the direction of developing less chronically toxic (i.e. non-H411 or H412 classified) surfactants, most of the high-performance surfactants available on the market today are at least classified with H412 and no sufficient alternatives with equivalent performance are yet available. This is especially true since LABSA/LAS (linear benzene sulfonic acid) components were forbidden some years ago, which was one of the most important surfactant groups for laundry detergents. In the current environment this restriction would lead to a poorer performance product. This would likely result in a higher consumption of surfactants not H412 with a very negative influence on sustainability. Especially effected are high-performance surfactants, both non-ionics and anionics, such as fatty alcohol ethoxylates; fatty alcohol ether sulfates and fatty alcohol sulfates. The introduction of limitation of H412 surfactants above specific concentration (very low) should be reconsidered.

Nordic Ecolabelling

Thank you for your comment. Surfactants classified as H411 and H412 are no longer exempt from the requirement; however, their use is still permitted. To accommodate the presence of such surfactants in products, the limit value has been adjusted (before consultation) – from 1% to 40 grams per litre in-use solution (10 for CIP products). This revised approach aims to align the requirement with other Nordic Swan Ecolabel criteria for chemical-technical products, while avoiding a general tightening of the overall requirement.

O11 Biodegradability

AUWA-Chemie GmbH

It is not clearly stated in the criteria, for which substances the limit of 0,6 % anNBO is valid. As it is now, all substances are concerned. Somewhere is mentioned that only detergents are concerned (as far as I remember it is O4) – the same as you told me some years before. But when it comes to CDV calculation all substances are considered for anNBO as well as for aNBO. Please see the attached file. Even Butyl di glycole would not be useable any longer - a NOGO for us.

Nordic Ecolabelling

Thank you for your comment. The upper limit is 0,6 g/litre in-use solution. Surfactants must be aerobically and anaerobically biodegradable under another requirement O4 Surfactants – and are therefore not included here. All other organic substances must be included except substances fulfilling the exemption given in Appendix 3, item 6, Anaerobic degradation. Butyldiglycol falls under this exemption since it is not a surfactant, it is aerobic biodegradable, LC50>10 and logkow<4.

MPE International

Regarding the limitation of anaerobically non-biodegradable (anNBO) substances. This should only be for non-water soluble substances. In particular for polymers, the choice of is, by nature, very limited unless inherent (slower) and also non-anaerobically biodegradable alternatives are allowed. This is particularly true in order to replace the function of phosphates and phosphonates (and thus get rid of) which should have a higher priority if environmental impact is in focus.

Nordic Ecolabelling

Thank you for your comment. Water solubility is not a guarantee that a substance is anaerobically biodegradable. For example, there are surfactants that are water-soluble but not anaerobically biodegradable. Moreover, our chemical requirements are hazard-based, not risk-based.

Zschimmer & Schwarz Italiana

We are concerned that the requirements regarding anaerobic biodegradability are overly stringent in the absence of suitable testing methods and better assessment of true risk, and can be challenging for key surfactants without providing accompanying environmental benefits. At a minimum, we feel that other relevant testing methods should also be included in the DID list part B, such as the AnBUSDIC test as an equivalent test method for anaerobic biodegradability, but also other approaches (e.g Read Across, QSAR, literature data and so on).

Lamberti S.p.A.

We are concerned that the requirements regarding anaerobic biodegradability are overly stringent in the absence of suitable testing methods and better assessment of true risk, and can be challenging for key surfactants without providing accompanying environmental benefits. At a minimum, we feel that other relevant testing methods should also be included in the DID list part B, such as the AnBUSDIC test as an equivalent test method for anaerobic biodegradability, but also other approaches (e.g Read Across, QSAR, literature data and soon).

CESIO (European Committee of Organic Surfactants and their Intermediates), a sector group of Cefic

CESIO members are concerned that the requirements regarding anaerobic biodegradability are overly stringent in the absence of suitable testing methods and better assessment of true risk, and can be challenging for key surfactants without providing accompanying environmental benefits. At a minimum, we feel that other relevant testing methods should also be included in the DID list part B, such as the AnBUSDIC test as an equivalent test method for anaerobic biodegradability, but also other approaches (e.g Read Across, QSAR, literature data and so on).

Nordic Ecolabelling

Thank you for your comment. Nordic Ecolabelling has evaluated and concluded not to accept the AnBUSDiC method. Our decision is based on publications as well as advice obtained from a 3rd party assessment of the method compared to ECETOC, ISO 11734 and OECD 311. Read-across is already permitted, as stated in Part B of the DID list.

O12 Critical dilution volume (CDV)

BASF SE

Regarding the reduction: As the reduction is significant this might lead to a reduced performance of the final product.

Nordic Ecolabelling

Thank you for your comment. Following the consultation, the CDV limit values have been increased for some product types. For the remaining product types, license data indicates that the proposed limit values are sufficient.

BPHR

Vi ser en betydande skärpning av CDV-kravet, från nuvarande 1 000 000 till 300 000 för flera produktgrupper. Vi bedömer att denna skärpning är för hög, i synnerhet för produktgruppen klotterborttagning. Vi menar att klotterborttagning inte kommer kunna miljömärkas med ett CDV-värde på 300 000, det behöver höjas till 1 000 000 för att vara möjligt. Produkterna är koncentrerade när de sätts på marknaden, varför det är naturligt att CDV-värdet är högt. Produkterna späds inte med vatten vid användning men eftersom det ställs krav på att klottersaneringsmedel och upplöst färg ska samlas upp, och därmed inte hamna i avloppsvattnet, motiverar det ett högre CDV-värde för dessa produkter.

Blue & Green

För en helt ny kategori bör man inte sätta för höga kriterier, som det är i remissen. Det är bättre att successivt öka kraven när produkter har blivit Svanenmärkta. Det handlar om nivån på CDV-värdet som bör sättas högre. I nuvarande kriterier har CDV upp till 1 000 000 accepterats för vissa produktkategorier. I förslaget, där man tydligt bryter ut Graffiti Removers och öppnar för fordonssanering, sätter man ett värde på 300 000. Detta värde bör åtminstone i denna utgåva vara 1 000 000 för denna nya produktkategori. Ha då i åtanke att avlägsnad färg och graffitisaneringsmedel samlas upp och inte går ut till recipient. Det är något som även finns med som förslag i remissen, att ska framgå i bruksanvisning av produkterna. CDV är ett kriterium som tar avstamp i påverkan på recipient.

DR.SCHNELL GmbH & Co. KGaA

We have the following change proposals regarding this requirement, especially concerning graffiti removers. Basically, we see a demand for high-performance removers in this sector due to our customers' requests for professional graffiti removers. Professional graffiti removers for this purpose are generally solvent-based rather than water-based in their composition. In our view, a water-based "graffiti remover" is more comparable to a high performing facade cleaner (building) or vehicle exterior cleaner. However, these products are already covered by other product groups within the Nordic Swan Ecolabel. This should be taken into account when introducing professional graffiti removers into criterion 065 to create a clear distinction. With this in mind, it is extremely challenging, if not impossible, to develop a non-water-based graffiti remover within the proposed criteria that can actually match the performance of currently available and used professional graffiti removers. From our perspective, it is not beneficial for sustainability to only be able to replace the "mild" graffiti removers with new Nordic Swan Ecolabel certified products if the majority of the used share remains with high-performance graffiti removers for which the proposed criteria are not feasible. The current demand for professional graffiti removers tends to include the following product requirements from customers: VOC-free, no CLP labeling, and biodegradable. We see these customer wishes as generally in good agreement with the proposed requirements. However, we consider the CDV limit of 300,000 to be problematic. Starting from the goal of developing a professional graffiti remover that has comparable performance to market-standard graffiti removers and simultaneously meets the Nordic Swan Ecolabel requirements, the selection of possible raw materials is currently extremely limited. Overall, a low CDV limit generally promotes the selection of less environmentally toxic raw materials over others. However, if there is no real choice of raw materials due to the limited options, a too-low CDV limit generally blocks the development of more sustainable graffiti removers entirely. An additional challenge

regarding the CDV limit is that for most relevant raw materials, long-term aquatic toxicology tests are often not available. As a result, the CDV value of formulations is greatly inflated by the high safety factors. This is particularly significant for non-water-based formulations. Currently, we do not see the possibility of falling below the CDV limit of 300,000 with available raw materials. We propose a CDV limit of 1, 000,000 for graffiti removers. This value is very challenging from our perspective but might be possible even for high-performance professional graffiti removers. From our perspective, a stricter limitation of this value would only make sense if Nordic Swan Ecolabel certified graffiti removers are established in the market in the future. To our knowledge, there is currently no Nordic Swan certified graffiti remover, which is why we support the revision of this criterion.

Nordic Ecolabelling

The CDV limit value for graffiti removers is increased to 600,000.

KiiltoClean

CVD calculations were OK.

Nordic Ecolabelling

Thank you for the feedback.

MPE International

We suggest to keep the higher CDV limits (500 000) for the solvent-based products (Ready-to-use, RTU) and graffiti removers. Limited the CDV will have a greater negative impact on performance as compared to the environmental benefit.

Nordic Ecolabelling

Thank you for your comment. We have increased the CDV limit value for solvent-based products (ready-to-use) to 400,000 and graffiti removers to 600,000.

O13 Performance

No consultation comments.

O14 User information

Miljøstyrelsen

Det antages, at dosseringsoplysningerne i kriterierne ligger ud over, hvad der i forvejen kræves i henhold til detergentforordningens regler.

Nordic Ecolabelling

There is some overlap regarding dosage and precautions to be taken during use. Otherwise, it is beyond what is required by the detergent regulation.

O15 Packaging

KiiltoClean

We would need an exemption for child safe caps for the criteria. This is due to some products in this category are at risk of ending up in consumer use although being intended for professional use. For those products, we would like to have the possibility to use child proof caps (such caps contain other plastics, as well).

Nordic Ecolabelling

Thank you for your comment. If certain products are sold to consumers, they cannot be Nordic Ecolabelled. See also the answer below.

Lilleborg Solenis

Vedrørende kapslene til kannene: Tetningen i kapslene som benyttes i 10L og 20L kapslene er EPE dvs. er polyetylen som er ekspandert med en skumstruktur eller Alveocel (polyolefinskum), mens den resterende delen av kapselen og selve kannen er i PE. Pga. kjemien/innholdet i et industriprodukt, vil disse produktene være klassifisert som farlig gods etter ADR/RID regelverket. Da må emballasjen være godkjent for dette. I forbindelse med det nylig reviderte maskinoppvaskriteriet var vi i dialog med flere leverandører av kapsler og det var kun kapsler med tetning i EPE og Alveocel, som hadde en godkjennelse for bruk til produkter klassifisert som farlig gods. I dette kriteriet må det derfor være tillatt med denne typen tetningsmateriale i korkene.

Nordisk Miljömärkning

Vi tar kommentaren til følge og setter inn samme type unntak som i kravene till maskinoppvaskmidler til profesjonell bruk (som også omfattes av myndighetskrav til frakt av farlig gods, ADR).

Miljøstyrelsen

Man kunne med fordel redegøre for, hvorfor kravet kun gælder emballager op til 20 liter, ligesom man så fint rede gør for baggrunden for andre dele af kravene.

Nordisk Miljömärkning

Takk for kommentaren, som vi tar til følge.

O16 Customer complaints

No consultation comments.

O17 Traceability

No consultation comments.

4.3.1 Appendices

Appendix 3

Miljøstyrelsen

Man bør inkludere OECD TG 321 over testmetoder som kan anvendes til at bestemme BCF. OECD TG 321 er lige så pålidelig som OECD TG 305.

Hvis man anvender TG 321 i stedet for TG 305 anvendes ikke forsøgsdyr (fisk er forsøgsdyr, mens invertebrater ikke betragtes som forsøgsdyr).

Nordic Ecolabelling

Thank you for your comment. We will include the OECD 321 test to our list of approved test methods. The test has just been approved for use as a 'standard information requirement' under REACH as an alternative to OECD 305. Under the Regulations on Animal Testing, fish are considered test animals from the moment they start consuming food from their environment and must be fed, meaning that the bioaccumulation test with fish (OECD 305) is applicable as an animal test and requires special permission. OECD 321 provides a non-vertebrate test for bioconcentration in aquatic environments. This is in line with phasing out the use of test animals, including fish, where it is possible.

5 Discussion and conclusion

Many comments highlighted that surfactants classified as H412 are no longer exempt from the requirement concerning on long-term environmental effects. Nordic Ecolabelling has not changed this requirement after the consultation, but rather clarified that the use of such surfactants is still permitted.

Several comments also addressed the CDV limit value for graffiti removers. In response, Nordic Ecolabelling has decided to increase the limit value for this product type following the consultation.

The consultation process has resulted in the changes presented in the list below. In addition, various editorial changes and clarifications have been made.

- The CDV limit values have been increased for solvent-based products (ready-to-use) and graffiti removers.
- Cleaners for solar modules have been included in the product group and assigned specific limit values for CDV and degradability.
- The exception stating that preservatives present at <0.01% by weight in the final product and enzymes in liquid form or as solid granulates (including stabilisers in enzyme raw materials) may be classified as H334 or H317 has been removed.
- The following exemption has been included in requirement O9 (Excluded substances): "Solvents in graffiti removers may contain ≤ 5000 ppm aromatic hydrocarbons as a result of the purification / refining process."
- The exemption for polycarboxylates from the ban on microplastic has been removed.
- An exemption for membranes, oblates and seals have been included in the packaging requirement.