

**Regulation (EC) No. 1907/2006 (REACH)
Proposal for a restriction of Per- and polyfluoroalkyl substances (PFASs)**

submitted by

BAuA - Federal Institute for Occupational Safety and Health
Bureau REACH, National Institute for Public Health and the Environment (RIVM)
Swedish Chemicals Agency (KEMI)
Norwegian Environment Agency
The Danish Environmental Protection Agency

Version Number: 2
Date: 22 March 2023

17 May 2023

Dear Sir or Madam,

Schreiner Group GmbH & Co. KG, Bruckmannring 22, 85764 Oberschleißheim welcomes the opportunity to contribute to the public consultation initiated by the European Chemicals Agency regarding potential restriction of Per- and polyfluoroalkyl substances ("PFAS") according to Regulation (EC) No. 1907/2006 ("REACH"), hereinafter also referred to as "**the Proposal**".

We refer to our initial submission of 22 March 2023 (Ref. 3834 according to the RCOM document available on the ECHA webpage). For further communication the following reference number has been provided:

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We would like to refer to the aforementioned reference number and provide our detailed submission as follows.

We remain at your disposal and would be happy to assist in case of any further questions in connection with this submission, including the corresponding requests for exemption or derogation, respectively.

We kindly thank you for considering our submission in connection with any next steps for the Proposal. Given that the evaluation of the Proposal and the process for preparation of the corresponding opinions at level of the Committee for Risk Assessment ("**RAC**") and the Committee for Socio-Economic Analysis ("**SEAC**") will already start during the public consultation, we respectfully request ECHA and its committees as well as the dossier submitters consider our submissions as part of the RAC and SEAC processes.

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A. Executive Summary

Schreiner Group submits that

- an explicit exemption for textiles for the use in filtration and separation media used in high performance air and liquid applications in industrial or professional settings that require a combination of water-and oil repellence should be included to avoid unintended risks due to the reduction of performance properties regarding oil and water repellence in connection with applications protecting vehicles, aircrafts, devices or parts thereof from malfunctions or defects;
- the justification for such exemption arises from various reasons, one being, that the Proposal in general is unlawful;
- the Proposal errs in ascribing the use of PFAS in connection with high performance membranes a high substitution potential;
- there are for chemical reasons no available or technically feasible alternatives which provide properties needed for the respective uses of high performance membranes and that, in particular, the Proposal does not mention any such alternative;
- the case at hand was already decided by RAC and SEAC in the PFHxA restriction procedure, in which the Final Opinion voted for an unlimited exemption of textiles for the use in filtration and separation media used in high performance air and liquid applications in industrial or professional settings that require a combination of water-and oil repellence.

B. Schreiner Group and its products

- (1) Schreiner Group is an internationally active German family-owned company and regarded as a preferred partner in the Healthcare and Mobility markets. Its core business is focused on top-quality functional labels enhanced by complementary system solutions and services. Schreiner Group's innovative high-tech labels and functional parts create new dimensions for smart solutions and help make life healthier and safer and enhance human mobility.
- (2) Schreiner Group uses the substance qualifying as PFAS, e.g. PFHxA, under the Proposal for oleophobic coatings of membranes made of polymers. Due to their specific properties and chemical composition, the substances used meet the criteria laid down in the scope of the Proposal and would therefore be subject to a possible restriction. The coated membranes are used in the automotive, aerospace and healthcare sector and need to be permeable to air or other gases but oleophobic and hydrophobic.
- (3) In particular, the membranes are used to seal housings of electronic parts such as control units, circuits, sensors etc. Such housings, in general, contain air so that a change in temperature (due to a change of ambient temperature or operational temperature) could result in over or under pressure. Continuous pressure changes damage the parts and components contained in the housings and would result in damages and/or malfunction of the device. Therefore, coated membranes are used to regulate the housing pressure and protect the contained parts and components to ensure operability of the device.
- (4) In addition, it needs to be noted that high-performance membranes used in the automotive, aerospace or healthcare sector need to have sufficient oleophobic and hydrophobic characteristics. While, on the one hand, electronic parts contained in membrane sealed housings need to be protected against water and oil to avoid that no media like oil, water or engine cleaner will penetrate the membrane and cause damages or malfunctions due to the fact that exposure of the relevant parts and housings to such media cannot be excluded over the entire operating life of e.g. a vehicle, aircraft or medicinal product, it needs to be noted that malfunctions of e.g. control units, circuits, sensors in such applications would immediately result in danger for life and health. Furthermore, industry and company standards established to define the respective characteristics require the use of coated membranes with sufficient oleophobic and hydrophobic properties.
- (5) Schreiner Group places approx. XXX m² of coated XXX membranes on the market per year. On basis of a coating of the XXX membranes with approx. XXX g/m² an

annual total of XXX kg XXX per year would be required and a total of XXX kg of XXX.

C. Submissions and observations

- (6) We acknowledge that there is a derogation regarding textiles for the use in filtration and separation media used in high performance air and liquid applications in industrial or professional settings that require a combination of water-and oil repellence granted in section 5e of the Proposal.
- (7) We submit, however, that the Proposal should be amended whereby a general exemption for these textiles without time-limit is incorporated in the restriction. This claim is substantiated by three main reasons, which will be outlined in the following. First, the Proposal is subject to general concerns as it does not comply with the requirements for restrictions under REACH and violates fundamental principles of European law. Second, in short, there are no available or technical feasible alternatives with regard to the respective uses. Third, RAC and SEAC already voted for a general exemption for the respective uses in the PFHxA restriction procedure and on basis of the same considerations a corresponding exemption should be implemented for PFAS in general.

I. Flaws of the Proposal

- (8) We submit that, already in general, the Proposal does not comply with the requirements for restrictions under REACH and violates fundamental principles of European law. These flaws include the intended scope of the Proposal, the lack of a risk evaluation for the thousands of substances covered by the Proposal, and the intended process to consider potential applications for exemptions or derogations.
- (9) The Proposal is unlawful primarily because it relies on persistence as the key property to justify the restriction. All other properties vary greatly between the different PFASs and are, moreover, not or insufficiently substantiated and proven for the vast majority of PFASs. This "P-only" approach, however, is not compatible with REACH, which is particularly evident from the fact that persistence is not in itself an environmental hazard, as required by Article 68(1) REACH. Related to this is also the observation that the Proposal has not carried out a proper hazard assessment according to REACH.

- (10) In addition, the Proposal violates the principle of proportionality because, in particular, a less onerous measure would have been available with the authorization according to Art. 55 REACH. Also, the assessment of alternatives was insufficiently carried out, since primarily alternatives of substances were referred to, which, according to the logic of the Proposal, would also have to be restricted due to their persistence.
- (11) Furthermore, the Dossier Submitters chose the wrong REACH measure, as all the circumstances point to an authorization according to Art. 55 REACH. This is mainly due to the fact that the Dossier Submitters have, as they acknowledge themselves, very little knowledge about the hazardousness of the specific PFASs and the socio-economic details of their respective uses (cf. the specific information requests of the webform provided for the consultation process, in particular No. 6). This is precisely the situation in which an authorization according to Art. 55 REACH is to be issued, giving the stakeholders the opportunity and responsibility to claim an authorization for their respective use while providing this kind of information.
- (12) Also, the grouping chosen by the Proposal is illegal, since the PFASs covered, even if having persistence in common, do not pose the same risk. However, a common risk is required for grouping according to the Guidance for the preparation of an Annex XV dossier for restrictions, p. 23. Furthermore, the Proposal infringes the principle of good administration and does not align with the precautionary principle.
- (13) Collectively, these flaws warrant a substantial revision of the Proposal. However, since we can and want to speak only for our specific use of PFASs, we consider as a consequence of these flaws primarily that a general exemption for our uses is granted.
- (14) Although it would be within our possibilities to give detailed legal reasons for these remarks, we refrain from making long comments on the unlawfulness of the Proposal. We assume that other stakeholders will examine these aspects in great detail and thus reach the conclusions on the reasons for unlawfulness that we have just mentioned. In this respect, we would like to avoid repetitions of detailed arguments at this point by referring to the other respective submissions.

II. Observations with regard to high performance membranes

- (15) Regardless of these general flaws of the Proposal, the need for and justification of a general exemption arise from the lack of available or technically feasible alternatives. In general, the assessment of alternatives is one of the core aspects when deciding on use-specific exemptions of a restriction. Accordingly, the Dossier Submitters value the existence of technically feasible non-PFAS alternatives as one key factor when determining the impact of the proposed restriction of PFASs on society as it determines the options available to companies to achieve compliance (cf. Proposal, Annex E, p. 18).
- (16) In the Proposal, high performance membranes are considered to be a sub-use in the sector of technical textiles. In fact, the Proposal explicitly refers to high performance membranes in various passages and, as stated above, intends to grant a 6,5-year derogation for textiles for the use in filtration and separation media used in high performance air and liquid applications in industrial or professional settings that require a combination of water-and oil repellence. This conclusion is flawed for two main reasons. First, the Proposal errs in ascribing a high substitution potential to such textiles. Second, there is in fact no current or future PFAS-free alternative with regard to high performance membranes like those produced by Schreiner Group for physically and chemically reasons.

1. Error in assessment with regard to substitution potential

- (17) With regard to currently available alternatives, the Proposal concludes, that there is sufficiently strong evidence, that technically feasible alternatives do not exist for all types of high performance membranes, while pointing at polyurethanes being a relevant alternative for some applications (Proposal, p. 84). Consequently, the Proposal ascribes high performance membranes a low substitution potential at EiF (Proposal, p. 84).
- (18) As for the point of time after a derogation (RO2), the Proposal states that stakeholder information and the Annex XV dossier for PFHxA point to a high substitution potential. This conclusion, however, is flawed as it cannot be backed by the information which were available to the Dossier Submitters according to Annex E of the Proposal.
- (19) As indicated by the Proposal, the conclusion is based on the Annex XV dossier for PFHxA which, according to the Proposal, suggests the same derogation as the

PFAS Proposal, despite acknowledging that some alternatives might already be available or will become so in the near future.

- (20) As for the reference to the PFHxA restriction procedure, it has to be noted, that the Final Opinion of RAC and SEAC as published on 8 December 2021 contains an unlimited exemption for filtration and separation media used in high performance air and liquid applications that require a combination of water- and oil repellency. Consequently, RAC and SEAC already concluded that in precisely the scenario at hand a time-limited derogation is not appropriate and such applications should be exempted from the scope of a restriction. Thus, according to general logic, a reference to considerations in the PFHxA restriction dossier, which obviously were rejected by RAC and SEAC, cannot have any effect with regard to justifying a (only) time-limited derogation.
- (21) With regard to stakeholder information, the Proposal (cf. Table 9) focusses on two main aspects. First, it claims, that stakeholder information suggests that alternatives to PTFE membranes and PFAS-coated products are produced but that PFASs are used for the production process. Furthermore, according to the Proposal, while filter media can also be produced without PFASs, such alternatives still need to be trialled, tested and validated. Second, the Proposal states, that stakeholder information suggests furthermore that between three and 36 months might be needed for testing and approval, while a supplier of filters for mist and dust removal suggests that at least three years are required for commercializing an alternative technology and receiving customer validation and approval.
- (22) These considerations, however, do not reflect the nature of the stakeholder opinions as laid down in Annex E to the Proposal.
- (23) Regarding high performance membranes, the Proposal (Annex E, Table E.11, p. 19 and p. 39, 40) states twice that, based on desktop research, no use-specific substances were identified as alternatives. In the further course of Annex E to the Proposal, Table 12 lists key groups of alternatives deemed relevant for TULAC. As for high performance membranes, the Proposal refers to Polyurethanes as a potentially relevant alternative for some applications. This goes back to the submission of one stakeholder who mentioned that polyurethane membranes are a proven alternative for PTFE membranes used in outdoor technical textiles, medical applications and high-performance membranes (Proposal, Annex E, p. 32). Furthermore, according to the Proposal, a manufacturer “suggested that an alternative weave construction could replace existing PFAS -based coatings in some PPE” (Proposal, Annex E, p. 22, footnote 15).

- (24) As can be concluded from Table E.14 (Proposal, Annex E, p. 34), these opinions have been erroneously considered in the Proposal. After conducting a call for evidence process (“**CfE**”), stakeholder consultation interviews and having consulted literature, the Dossier Submitters concluded that, regarding technical textiles, there are no available or technical feasible alternatives while explicitly noting that alternatives cannot replicate certain required functionality, e.g. oil repellence. After the second consultation, however, it is stated that there is an available alternative, since polyurethane membranes are reported to be a proven alternative for, inter alia, high performance membranes. Furthermore, the Proposal concludes that there is a partial technical feasibility of alternatives because the second stakeholder consultation revealed information pointing towards proven use of alternatives.
- (25) Again, it has to be pointed out that only two stakeholders indicated an alternative either for specific uses or not specifying the corresponding functionality in detail while every other submission regarding technical textiles came to the conclusion, that there are no current or technically feasible alternatives. Against this background, the conclusions of the Dossier Submitters are improper. This holds true especially in view of the fact, that no substantiation or further details regarding the use of Polyurethane have been discussed in the Proposal. In particular, no such information was given with regard to high performance membranes.
- (26) Moreover, the Proposal itself states, that, with respect to technical textiles, information from literature, stakeholder interviews and the CfE suggests that technically feasible alternatives are generally not available – with stakeholder input suggesting that longer transition periods up to 10 years are required for technical textiles (Proposal, Annex E, p. 31). Consequently, the Dossier Submitters conclude that alternatives seem to be less generally available for technical textiles than for consumer applications for instance, while noticing, that substitution might be a possible option for stakeholders in relation to - at least – some technical textile applications (Proposal, Annex E, p. 32).
- (27) As for substitution potential, Annex E to the Proposal states with regard to technical textiles, that none of the stakeholders responding to the section on alternatives in the CfE (25 stakeholders) indicated that technically feasible alternatives are available (Proposal, Annex E, p. 40). Furthermore, according to the Proposal, the vast majority of stakeholders indicated that the mentioned alternatives are not technically feasible, with the dominant share of submissions relating to high performance membranes (Proposal, Annex E, p. 40).
- (28) However, there is one stakeholder indicating that, with respect to high performance membranes, some suppliers provide alternatives to PTFE membranes and PFAS-coated products, but that these suppliers use PFASs during the production process

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and that, while production without PFASs seems possible, such alternatives still need to be trialled and validated (Proposal, Annex E, p. 40).

- (29) Against this background, it is highly questionable for the Proposal (cf. p. 117) to refer to this one mentioned alternative (which uses PFAS during the production process) stating, that “alternatives are already in R&D stage”, while the vast majority of stakeholder information pointed in the direction, that alternatives, especially regarding high performance membranes, are not technically feasible. Furthermore, even the conclusion that there is a partial technical feasibility of alternatives is flawed from the very beginning, since (cf. above) it is based on only one stakeholder indicating that polyurethane membranes are a proven alternative for PTFE membranes used in high-performance membranes, without specifying details.
- (30) With regard to the time required for completing substitution and implementing the product on the market, the Proposal again does not properly reflect the stakeholder information gathered in Annex E to the Proposal.
- (31) The time periods ultimately stated in the Proposal (3-36 months for testing and approval; at least three years for commercializing an alternative technology and receiving customer validation and approval, cf. p. 117) can be found in the compilation of stakeholder information in Annex E of the Proposal (Proposal, Annex E, p. 55). However, in this respect the Dossier Submitters have only picked out the shortest time periods that were reported. Moreover, the extremely short time span of 3 months refers specifically to the "approval of filtration media in line with the VDI 3962 test", which is only a special situation that does not allow any general conclusions. Moreover, the information provided by one stakeholder that in the past the substitution from C8 to C6 substances in filtration applications took eight to ten years (cf. Proposal, Annex E, p. 55) is completely disregarded. Again, it must be noted that the Dossier Submitters have been very selective in choosing short time periods to justify the shorter transition period. However, this represents a distortion of the information submitted.
- (32) After all, the three justifications for a derogation period of (only) 6,5 years for textiles for the use in filtration and separation media used in high performance air and liquid applications in industrial or professional settings that require a combination of water- and oil repellence fail to be conclusive and substantiated. In contrary, the vast majority of information available to the Dossier Submitters clearly indicated that the substitution potential for such textiles after 6,5 years and even after 13.5 years is low as alternatives are not technically feasible.
- (33) In particular, the Proposal clearly states with respect to high performance membranes, that there is sufficiently strong evidence that technically feasible

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alternatives do not exist for all types of high performance membranes (cf. Proposal, Annex E, p. 41). Thus, the deviating evaluation in the main part of the proposal (p. 117), which attests all (!) high performance membranes a high substitution potential in the future, can therefore only be due to claims made in the Annex XV dossier for PFHxA. As already stated, however, the Final Opinion of RAC/SEAC in this proceeding precisely came to the conclusion to grant an exemption for an unlimited period of time. This indicates that the arguments of the Annex XV dossier for PFHxA have obviously not been convincing in this respect and, accordingly, cannot change the assessment resulting from the stakeholder information in the current proceeding.

2. Lack of alternative

- (34) Irrespective of these shortcomings, it has to be pointed out, that there are in fact no available or technically feasible alternatives regarding the use in high performance membranes like those produced by Schreiner Group. This is due to chemical and physical reasons which will be pointed out in detail below.
- (35) As indicated above, high-performance membranes used in the automotive, aerospace or healthcare sector need to have sufficient oleophobic and hydrophobic characteristics. The oleophobic character of a material is described by the textile standard AATCC 118. According to this standard, materials have an oil repellency of grade 0 to grade 8, as shown in the figure below.

Das Herzstück des Druckausgleichs: Die Membran

2. AATCC 118: Oleophobic grade

schreiner
ProTech

Grade	Medium	Flüssigkeit
0	none	
1	Kaydol	
2	Kaydol:n-hexadecane	
3	n-hexadecane	
4	n-tetradecane	Öle
5	n-dodecane	
6	n-decane	Alkohole, Brems- flüssigkeit
7	n-octane	
8	n-heptane	Super Benzin

Oleophobic Grade der Schreiner ProTech Membranen



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- (36) The chemical background of oil repellency lies in the Young equation. Young's equation states that to achieve a contact angle of 90° , the surface energy of the solid must be one quarter of the surface tension of the liquid. For solid surfaces to repel liquids with very low surface tension, such as brake fluid or super gasoline, the solid surface must have at least CF3 groups.
- (37) In particular, it has to be noted that fluorine-free materials have significantly higher surface energies than materials which contain fluorine. As can be seen from the figure below (right column), for example, PET has a surface energy of 42-43 mN/m while CF3-containing materials have a surface energy of 6 mN/m. Furthermore, the figure below (left column) shows, that, for example, gasoline has a surface tension of approx. 22.0 mN/m and therefore, according to the Young equation requires, to achieve a contact angle of 90° , the solid surface to have a surface energy of 5.5 mN/m.

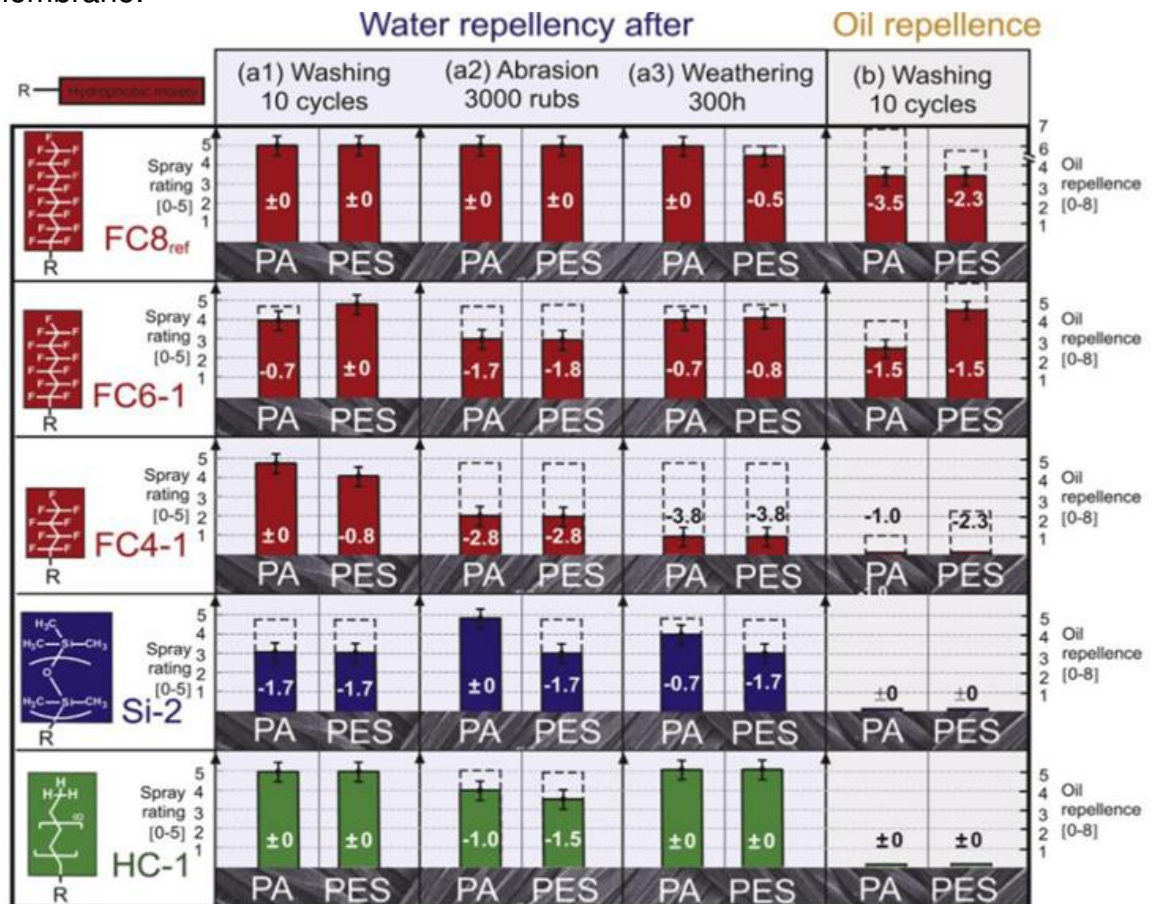
Oberflächenenergie/-spannung von Flüssigkeiten und Kunststoffoberflächen schreiner ProTech

Liquid	Surface tension (mN/m)	Kunststoff	Oberflächenenergie
Water	72.8	-CF3	6 mN/m ^a
Liquid paraffin	33.1	PTFE	< 18-19 mN/m
<u>n-Hexadecane</u>	<u>27.5</u>	(-CF₂-CF₂-)	
<u>n-Tetradecane</u>	<u>26.6</u>	Silikon	< 20 mN/m
<u>n-Dodecane</u>	<u>25.4</u>	PP	ca. 29-30 mN/m
<u>n-Decane</u>	<u>23.8</u>	PE	ca. 30-32 mN/m
Methanol	22.7	PS	ca. 34-38 mN/m
Ethanol	22.1	PMMA	ca. 33-44 mN/m
Gasoline	ca. 22.0	PC	ca. 35-40 mN/m
<u>n-Octane</u>	<u>21.6</u>	PA6	ca. 40-43 mN/m
<u>n-Heptane</u>	<u>20.1</u>	PET	ca. 42-43 mN/m
n-Hexane	18.4	PUR	ca. 43-47 mN/m
n-Pentane	18.3		

Quelle: www.surface-tension.de

Quelle: www.schnick.de; *Tsuji et al., Angew. Chem. Int. Ed. Engl. 1997, 36, No. 9, page 1011-1012

- (38) However, the mere presence of CF₃ groups is not sufficient for oil repellence. Rather, the CF₃ group must be bound to a CF₂ chain of sufficient length. To achieve an oil repellence of at least grade 6 in the AATCC 118 scale, a C₆- or C₈-containing coating is necessary. As shown in the figure below, a fluorine-free coating and even a C₄-containing coating is not suitable for oil repellence of a high performance membrane.



- (39) Furthermore, the figure below shows that crystalline fluorine-containing side chains are formed only from a C₈-containing coating, resulting in very high water and oil repellency. The shorter the fluorine-containing side chains become, the more random or amorphous they become, and the water and oil repellency continually decreases as the length of the side chain decreases.

Strukturen fluorhaltiger Polymere auf Oberflächen

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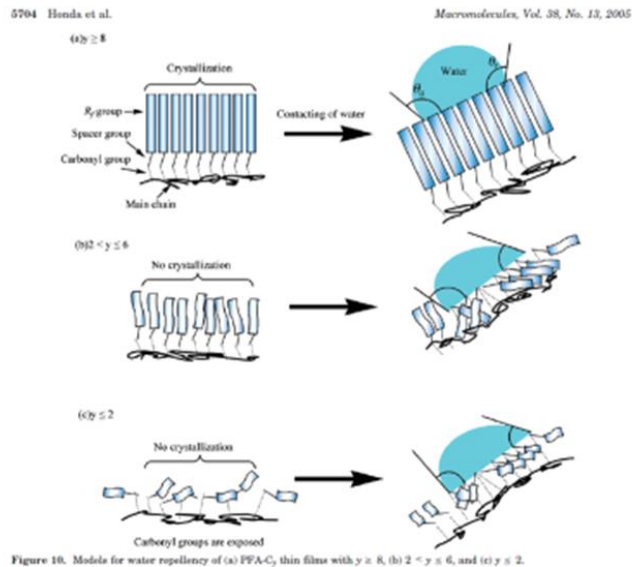
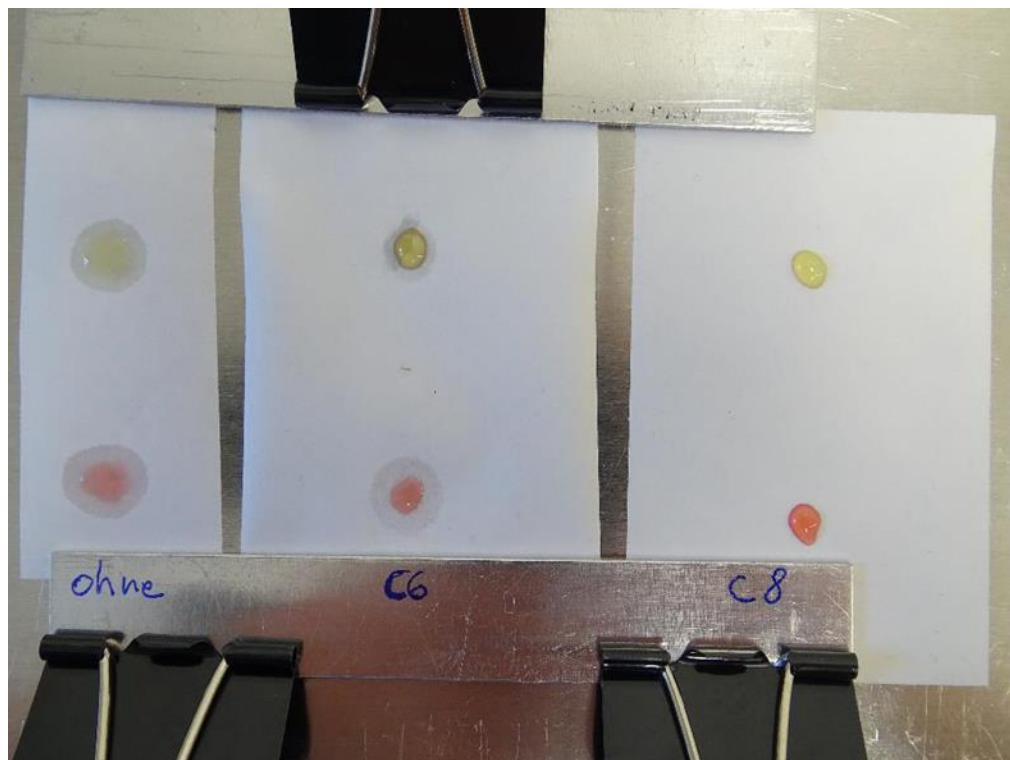


Figure 10. Models for water repellency of (a) PFA-Cy thin films with $y \geq 8$, (b) $2 < y \leq 6$, and (c) $y \leq 2$.

- (40) By way of clarification we would like to outline that coatings significantly change the oleophobic and hydrophobic properties of e.g. membranes:



Membrane material without any coating has only limited oleophobic and hydrophobic properties (cf. above on the left), while coatings on basis of C8 chemistry would provide for the best properties (cf. above on the right) meeting actual industry standards (i.e. grade 8). But at least coatings on basis of C6 chemistry (cf. above in the middle) would be required to achieve minimum properties necessary for high-performance applications in the automotive, aerospace and healthcare sector.

- (41) After all, it has been shown that in order to get a high oil repellence, a low surface energy of the material is necessary, which fluorine-containing materials rather show than fluorine-free materials. Furthermore, it was shown that even certain fluorine-containing materials do not achieve grade 6 on the AATCC 118 scale, which is necessary to repel, for example, brake fluid. For chemical and physical reasons, oil repellence of at least grade 6 can only be achieved by a C6- or C8-containing coating of the membrane.
- (42) There is currently no substance-based alternative for such C6- or C8-containing coatings. In fact, neither we nor our suppliers or customers are aware of suitable alternatives which can be used as of today to replace the Substance in coatings of membranes for the uses described above.
- (43) We further submit, that there are no technically feasible alternatives.
- (44) While we are involved in various R&D projects with our suppliers and customers to find suitable alternatives, we must submit that these projects won't lead to short-term results, if any at all. This, in particular, holds true as any new material or application needs to be qualified in accordance with applicable regimes in the automotive, aerospace and healthcare sector. Alternative substances or coatings for membranes can, thus, only be used upon (i) identification of a technical suitable alternative, (ii) completion of relevant qualification processes and (iii) amendment of underlying quality assurance agreements or similar specifications agreed upon along the supply chain. However, such an alternative is technically not feasible, since the chemical circumstances outlined above suggest that it is precisely the properties imparted by the fluorine that enable high oil repellence.
- (45) Moreover, coated PTFE membranes cannot be replaced by other types of uncoated membranes for the applications relevant to Schreiner Group's customers. In particular, uncoated polyurethane membranes, which are mentioned in the Proposal as an alternative, cannot be used as oleophobic membranes (cf. (37)). After all, the Proposal does not mention any alternatives for oleophobic coatings and in particular

C6-containing coatings. This is a matter of science because, for the reasons mentioned above, there can be no such flour-free alternatives.

- (46) We want to point out, that this conclusion is congruent with those drawn by the Proposal, since the Proposal explicitly states, that, with respect to high performance membranes, there is sufficiently strong evidence that technically feasible alternatives do not exist for all types of high performance membranes (cf. Proposal, Annex E, p. 41).

3. Consequences and conclusions

- (47) Against this background, it has to be noted, that in case of a restriction without any derogation, such membranes with the above mentioned properties, especially with an oil repellence of grade 6 or more, would disappear from the market. Consequently, there would occur high safety risks due to the use of worse, less-repellent membranes, especially in the automotive sector. This is due to the simple fact that such membranes are a necessary part of automobiles since the respective component must be able to achieve pressure equalization through temperature change. As the components are located in the engine room, contamination with liquids like gasoline is to be expected. Without an oleophobic coating, this contamination is likely to impair the functionality of the membrane, which in turn can lead to the failure of safety-relevant electronic components, such as engine control units and steering electronics, due to a lack of pressure compensation. If the membrane fails, there is thus a risk of total failure of the steering system with the consequence that the driver can no longer actively influence the specific driving situation.
- (48) As this scenario from the automotive sector illustrates, the membranes and their adequate coating thus play a decisive role in safety-relevant systems and processes. In addition, Schreiner Group and the automotive industry as a whole would suffer great economic damage if the membranes had to be withdrawn from the market. The Proposal should therefore be amended to avoid adverse market effects and to allow market actors to maintain uses of the Substance in security-relevant applications like the use of coated membranes in the automotive, aerospace and healthcare sector.
- (49) The outlined problems for society, the automotive industry and also Schreiner Group itself would only be postponed by a temporary derogation as currently proposed. After all, the development of a fluorine-free, equally effective alternative is impossible due to chemical realities. In this respect, we want to point out that the

Proposal precisely does not mention an existing or technically feasible alternative with regard to materials that are oil-repellent with at least grade 6.

- (50) In addition, we submit, that the Dossier Submitters are very aware of the fact, that manufacturers of high performance membranes and their products are likely to disappear from the market if a restriction is imposed. After all, they anticipate a “mix of substitution and closure of business, with tendency towards business closures assumed for some applications, e.g. high performance membranes” (Proposal, Annex E, p. 52; cf. as well p. 66, 73).
- (51) Against this background, it should also be noted that the quantity of PFASs used by Schreiner Group is rather low. As laid down above, the overall consumption of PFASs by Schreiner Group is approx. XXX kg per year. Compared with other uses and applications of PFASs we are of the opinion that these volumes are rather minimal and against the background of the significant relevance of the respective coatings for the protection of security-related parts used in the automotive, aerospace and healthcare sector it seems to be reasonable to exclude the respective uses from the scope of the Proposal and the potential restriction.

III. Interlink with PFHxA restriction Proposal

- (52) The third reasons for which a time unlimited exemption for high performance membranes is to be granted arises from a comparison to the PFHxA restriction process. In this respect, it must first be clarified that a restriction process is already underway for PFHxA, for which the Final Opinion of RAC and SEAC is already available (cf. ECHA/RAC/RES-O-0000006976-57-01/F; ECHA/SEAC/RES-O-0000007039-72-01/F). Nevertheless, PFHxA was included in the scope of the PFAS restriction proposal. In the PFHxA restriction proceeding, Schreiner Group, among others, has argued that an exemption should be granted for high performance membranes (cf. RCOM No. 3100, submission of 2020/09/25). As can be seen from the RAC response in the RCOM, the Dossier Submitters (in contrast to the Annex XV dossier) already proposed to exempt filtration and separation media from the restriction.
- (53) Accordingly, the Final Opinion now provides an indefinite exemption for filtration and separation media used in high performance air and liquid applications that require a combination of water and oil repellence (cf. proposed entry, No. 9 (h)). RAC and SEAC justify this exemption with the fact that this use, if restricted, is considered to have high societal costs and alternatives do not meet the properties needed with regard to oil and/or dirt repellence (cf. Final Opinion, p. 50).

- (54) It is obvious that for the case at hand there is already a conclusive assessment by RAC and SEAC with regard to an exemption to be granted to high performance membranes. Thus, we assume that RAC and SEAC come to the same conclusion in the PFAS restriction procedure, which is why it is difficult to understand why the Dossier Submitters act contrary to this clear assessment.
- (55) In this respect, it must be emphasized that RAC and SEAC have come to exactly the same conclusion with regard to PFHxA as the present submission, namely that there are no suitable alternatives available or technically feasible. Otherwise, the Final Opinion would have opted for a time-limited derogation instead. Therefore, it is obvious to agree with this finding also in the PFAS procedure.
- (56) Moreover, RAC and SEAC are bound by their evaluation in the Final Opinion on PFHxA. A different decision would be highly contradictory.

D. Relief sought

- (57) For all reasons mentioned above, we submit that there should be general exemption for textiles for the use in filtration and separation media used in high performance air and liquid applications in industrial or professional settings that require a combination of water and oil repellence and in particular high performance membranes. If considered necessary, a general exemption could also be supplemented to enable the Commission to review the exemption in the light of new scientific information, including information on alternative substances and materials, and, if appropriate, modify this paragraph accordingly by a specific date, for example 5 years after entry into force.
- (58) Alternatively, we submit that the derogation period should be expanded to up to 13.5 years, due to the fact that in particular with regard to high performance membranes as produced by Schreiner Group and as used for multiple applications in various sectors there are no alternatives available on the market. This is justified by the fact that, even if one were to assume a technically feasible substitutability, this process would take significantly longer than 6.5 years. In this respect, the Proposal acknowledges "stakeholder input suggesting that longer transition periods of up to 10 years are required for technical textiles" (Proposal, Annex E, p. 31). Moreover, according to the Proposal, a longer transition period would cause lower costs than the shorter transition period (cf. Proposal, p. 118).

We would be happy to assist in case there are any further questions. Please do not hesitate to contact us, in case specific contributions might be considered helpful.

Yours sincerely,



Thomas Köberlein, Oberschleißheim
President Schreiner ProTech
Schreiner Group GmbH & Co. KG, Business Unit Protech