

Survey on specific PFCAs (C9-C20) and other fluorinated substances (precursors or similar substances)

–Preview of the questionnaire–

Please note:

This is a pdf-based preview of the online questionnaire to give you an overview of the information you might be asked for. In the online-questionnaire you will be asked only those questions which are relevant with regard to your role(s) under REACH, which you will be asked to provide in the very first section of the questionnaire.

In the online-version you might be asked additional or less questions dependent upon the answers you are providing.

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Your role under REACH and your contact information

What is your role under REACH? (multiple answers possible)

Please choose **all** that apply:

- Manufacturer / Importer of specific PFCA (C9-C20) or other fluorinated substances (precursors or similar substances - on their own or in mixtures)
- User of specific PFCA (C9-C20) or other fluorinated substances (precursors or similar substances) to formulate chemical products (mixtures) by direct use of a pure substance or preformulated mixture
- Downstream (End) user of products as process chemical that contain specific PFCA (C9-C20) or other fluorinated substances (precursors or similar substances) or fluorine free alternatives
- Downstream (End) user of products that contain specific PFCA (C9-C20) or other fluorinated substances (precursors or similar substances) or respective fluorine free products where the fluorinated compound remains in the final article
- Manufacturer / Importer of fluorine free alternative substances
- Formulator that produces fluorine free alternative products (mixtures)

Contact information

Name of your organisation:
Name, surname (main contact for this questionnaire):
Email address:
Phone number:
What is the main field of activity of your business?:

We might have some follow up questions or the need for clarification of your answers, do you agree that we contact you for a personal telefon interview?

- Yes
- No

If you wish to print or export your given information on this site, please use your browsers print function (ctrl-p).

Manufacturer/Importer of Substances

Specific substances (C9 - C20 PFCAs)

Are you manufacturing/importing one of the following substances? If so, please provide data on the average tonnage you manufacture/import (as an average value or as range per year) and the possible technical function/s of the substance.

If not, please go on specifying which other per- or polyfluorinated and/or fluorine free alternative substances you manufacture/import in the next section and leave these fields blank.

	tonnage average value [kg/year]	~ tonnage min [kg/year]	~ tonnage max [kg/year]	technical functions
PFNA, Perfluorononan-1-oic acid (C9-PFCAA), CAS 375-95-1				
PFDA, Nonadecafluorodecanoic acid (C10-PFCAA), CAS 335-76-2				
PFUnDA, Henicosafluoroundecanoic acid (C11-PFCAA), CAS 2058-94-8				
PFDoDA, Tricosfluorododecanoic acid (C12-PFCAA), CAS 307-55-1				
PFTrDA, Pentacosfluorotridecanoic acid (C13-PFCAA), CAS 72629-94-8				
PFTDA, Heptacosfluorotetradecanoic acid (C14-PFCAA), CAS 376-06-7				
PFPeDA, Nonacosfluoropentadecanoic acid, (C15 PFCA), CAS 141074-63-7				
PFHxDA, Hentriacontafluorohexadecanoic acid- (C16 PFCA), CAS 67905-19-5				
PFHpDA, Perfluoroheptadecanoic acid (C17 PFCA), CAS 57475-95-3				
PFODA, Pentatriacontafluorooctadecanoic acid (C18 PFCA), CAS 16517-11-6				
PFNDA, Perfluorononadecanoic acid (C19 PFCA), CAS 133921-38-7				
- , Perfluoroeicosanoic acid (C20 PFCA), CAS 68310-12-3				

Substance specification

Please specify any additional fluorinated or fluorine free alternative substances you manufacture/import.

If you manufacture/import more than 5 of these substances please download this Excel-Sheet ([SubstancesList.xls](#)) and provide as much information on the substances as possible. You can take as much time as you need to fill out the list and come back later to upload it below and leave the following lines blank.

Substance name:
CAS-Number:
Additional identifier:
Tonnage average value [kg/year]:
~ Tonnage min [kg/year]:
~ Tonnage max [kg/year]:
Technical function/s of the substance:

Please specify the chemical substances group.

- COOH (carboxylic acids)
- SO₃H (sulfonic acids)
- O=P(OH)₂ (phosphonic or phosphinic acids)
- I (iodides)
- OH (alcohols)
- CH₂CH₂OC(O)CH=CH₂ (acrylates)
- CH₂CH₂OC(O)C(CH₃)=CH₂ (methacrylates)
- Corresponding cat ion to carboxylic an ions meaning COO-
- Other : _____

Please specify the type of the substance?

- fluorinated substance
- fluorine free alternative

Substance 2

If you manufacture/import another fluorinated or fluorine free alternative substance, please go on specifying.

...

If you used the Excel list, please upload the list with the specification of the fluorinated and/or fluorine free alternative substances you manufacture/import here.

Please indicate (as far as you know) in which type of products your fluorinated and/or fluorine free alternative substances are being used in.

There is the opportunity to add additional information (e.g. product names, brands) or to specify the products in more detail in the right column.

Please choose all that apply and provide a comment:

- PC1 - Adhesives, sealants
- PC2 - Adsorbents
- PC3 - Air care products
- PC4 - Anti-freeze and de-icing products
- PC8 - Biocidal products (e.g. disinfectants, pest control)
- PC9b - Fillers, putties, plasters, modelling clay
- PC9c - Finger paints
- PC14 - Metal surface treatment products, including galvanic and electroplating products
- PC15 - Non-metal-surface treatment products
- PC16 - Heat transfer fluids
- PC17 - Hydraulic fluids
- PC18 - Ink and toners
- PC20 - Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
- PC21 - Laboratory chemicals
- PC23 - Leather tanning, dye, finishing, impregnation and care products
- PC24 - Lubricants, greases and release products
- PC25 - Metal working fluids
- PC26 - Paper and board dye, finishing and impregnation products: including bleaches and other processing aids
- PC27 - Plant protection products
- PC28 - Perfumes, fragrances
- PC29 - Pharmaceuticals
- PC30 - Photochemicals
- PC31 - Polishes and wax blends
- PC32 - Polymer preparations and compounds
- PC34 - Textile dyes, finishing and impregnating products
- PC35 - Washing and cleaning products (including solvent based products)
- PC36 - Water softeners
- PC37 - Water treatment chemicals

- PC38 - Welding and soldering products, flux products
- PC39 - Cosmetics, personal care products including products such as toothpaste, deodorants, etc.
- PC40 - Extraction agents
- PC41 - Oil and gas exploration or production products
- PC42 - Electrolytes for batteries
- PC0 - Other (the type of product should be specified, e.g. UCN code)

If you wish to print or export your given information on this site, please use your browsers print function (ctrl-p).

Formulator of Substances

We are highly interested in the bandwidth of products that contain fluorinated substances (similar substances and precursors) or their fluorine free alternatives.

What are the technical function/s the fluorinated and/or fluorine free alternative substances are used for in your products in general?

Please choose **all** that apply:

- | | |
|---|---|
| <input type="checkbox"/> Absorbent | <input type="checkbox"/> Flotation agent |
| <input type="checkbox"/> Adhesion promotor | <input type="checkbox"/> Flow promoter |
| <input type="checkbox"/> Antiadhesive | <input type="checkbox"/> Foamant |
| <input type="checkbox"/> Anticaking agent | <input type="checkbox"/> Impregnation agent |
| <input type="checkbox"/> Anticondensation agent | <input type="checkbox"/> Intermediate (precursor) |
| <input type="checkbox"/> Antioxidant | <input type="checkbox"/> No technical function |
| <input type="checkbox"/> Antiredeposition agent | <input type="checkbox"/> Plasticizer |
| <input type="checkbox"/> Antistatic agent | <input type="checkbox"/> Plating agent |
| <input type="checkbox"/> Antistreaking agent | <input type="checkbox"/> Process regulator |
| <input type="checkbox"/> Barrier (Sealant) | <input type="checkbox"/> Processing aid |
| <input type="checkbox"/> Biocide | <input type="checkbox"/> Resins (prepolymers) |
| <input type="checkbox"/> Cleaning agent | <input type="checkbox"/> Semiconductor and photovoltaic agent |
| <input type="checkbox"/> Corrosion inhibitor | <input type="checkbox"/> Sizing agent |
| <input type="checkbox"/> Defoamer | <input type="checkbox"/> Surface modifier |
| <input type="checkbox"/> Demulsifier | <input type="checkbox"/> Surfactant |
| <input type="checkbox"/> Dispersing agent | <input type="checkbox"/> Terminator/Blocker |
| <input type="checkbox"/> Durability agent | <input type="checkbox"/> Waterproofing agent |
| <input type="checkbox"/> Film former | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Finishing agents | |

Product Specification

Please specify your products containing fluorinated or fluorine free alternative substances.

If you produce more than 5 of such products, please download this Excel-Sheet ([ProductList.xls](#)) and provide as much information on these products as possible. You can take as much time as needed to fill out the list and come back later to upload it below and leave the following lines blank.

Product Name:	
Additional product information (e.g. end product names, brand):	
Production volume of the formulated product [kg/year]:	

Product with fluorinated or fluorine free alternative substance/s?

- product with fluorinated substance/s
- product with fluorine free alternative substance/s

Please specify the products type.

Please choose **only one** of the following:

- PC1 - Adhesives, sealants
- PC2 - Adsorbents
- PC3 - Air care products
- PC4 - Anti-freeze and de-icing products
- PC8 - Biocidal products (e.g. disinfectants, pest control)
- PC9b - Fillers, putties, plasters, modelling clay
- PC9c - Finger paints
- PC14 - Metal surface treatment products, including galvanic and electroplating products
- PC15 - Non-metal-surface treatment products
- PC16 - Heat transfer fluids
- PC17 - Hydraulic fluids
- PC18 - Ink and toners
- PC20 - Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
- PC21 - Laboratory chemicals
- PC23 - Leather tanning, dye, finishing, impregnation and care products
- PC24 - Lubricants, greases and release products
- PC25 - Metal working fluids
- PC26 - Paper and board dye, finishing and impregnation products: including bleaches and other processing aids
- PC27 - Plant protection products
- PC28 - Perfumes, fragrances
- PC29 - Pharmaceuticals
- PC30 - Photochemicals
- PC31 - Polishes and wax blends
- PC32 - Polymer preparations and compounds
- PC34 - Textile dyes, finishing and impregnating products
- PC35 - Washing and cleaning products (including solvent based products)
- PC36 - Water softeners
- PC37 - Water treatment chemicals
- PC38 - Welding and soldering products, flux products
- PC39 - Cosmetics, personal care products including products such as toothpaste, deodorants, etc.
- PC40 - Extraction agents
- PC41 - Oil and gas exploration or production products
- PC42 - Electrolytes for batteries
- PC0 - Other (the type of product should be specified, e.g. UCN code)

Specific substances (C9 - C20 PFCAs)

Does your product contain any of the following substances? If so, please provide data on the average tonnage you use of the very substance in the product (as an average value or as range per year) and its technical function/s you are using it for.

If none of these fluorinated substances is used in your product please go on specifying the fluorinated substance/s used in the product in the next table.

	tonnage average value [kg/year]	~ tonnage min [kg/year]	~ tonnage max [kg/year]	technical functions
PFNA, Perfluorononan-1-oic acid (C9-PFCAA), CAS 375-95-1				
PFDA, Nonadecafluorodecanoic acid (C10-PFCAA), CAS 335-76-2				
PFUnDA, Henicosafluoroundecanoic acid (C11-PFCAA), CAS 2058-94-8				
PFDODA, Tricosafluorododecanoic acid (C12-PFCAA), CAS 307-55-1				
PFTTrDA, Pentacosafuorotridecanoic acid (C13-PFCAA), CAS 72629-94-8				
PFTDA, Heptacosafuorotetradecanoic acid (C14-PFCAA), CAS 376-06-7				
PFPeDA, Nonacosafuoropentadecanoic acid, (C15 PFCA), CAS 141074-63-7				
PFHxDA, Hentriacontafluorohexadecanoic acid- (C16 PFCA), CAS 67905-19-5				
PFHpDA, Perfluoroheptadecanoic acid (C17 PFCA), CAS 57475-95-3				
PFODA, Pentatriacontafluorooctadecanoic acid (C18 PFCA), CAS 16517-11-6				
PFNDA, Perfluorononadecanoic acid (C19 PFCA), CAS 133921-38-7				
- , Perfluoroeicosanoic acid (C20 PFCA), CAS 68310-12-3				

Substance Specification

Please specify the fluorinated and/or fluorine free alternative substances used in the product by providing the substances name/s, chemical group/s, CAS-Number/s and average tonnage you use of the substances as an average per year.

Please separate with a (,) if you use several fluorinated or fluorine free alternative substances in the one product.

Substance/s name/s:
Chemical group/s of substance/s:
CAS-Number/s:
Other identifier/s:
Concentration/s [w/w]:
Concentration/s range min [w/w%]:
Concentration/s range max [w/w%]:
Technical function/s:

Product 2

If you produce another product containing one or more fluorinated or fluorine free alternative substances, please go on specifying.

...

If you used the Excel list, please upload the list with the specification of your products containing the fluorinated and/or fluorine free alternative substances here.

Please indicate how the formulation process is performed in your organisation.

- continuous production (every day) with a production volume above 100 t per day
- continuous production (every day) with a production volume above 10 t per day
- continuous production (every day) with a production volume above 1 t per day
- continuous production (every day) with a production volume above 100 kg per day
- batch production with a production volume above 100 t per event
- batch production with a production volume above 10 t per event
- batch production with a production volume above 1 t per event
- batch production with a production volume above 100 kg per event
- Other: _____

Please indicate the average number of events per year.

_____ events per year.

Please provide some information on potential pathways how fluorinated substances can leave your formulation process (apart from the product itself).

Please choose all that apply and provide a comment:

- Some fluorinated substances are leaving the process via waste water (either from the process itself or via cleaning procedures of the establishment), please indicate concentrations of the substance(s) in the waste water if data is available: _____
- Some fluorinated substances are contained in either liquid or solid waste, please name waste codes that are used to dispose the waste: _____
- Some fluorinated substances are emitted via off air, please indicate off air concentration [mg/m³]: _____
- Some fluorinated substances are decomposed under the conditions of the process. Please indicate these decomposition losses.: _____

If you wish to print or export your given information on this site, please use your browsers print function (ctrl-p).

Downstream user of fluorinated substances or fluorine free alternatives

We're highly interested in the bandwidth of processes and products in which fluorinated substances (specific substances and / or precursors or similar substances) are used or that contain these substances or its fluorine free alternatives.

Process specification

Please indicate in which process/es you are using the products that contain fluorinated and/or fluorine free alternative substances (e.g. textile treatment, paper production, etc.), the products name/s, your approximate consumption volume of the product that contains the fluorinated substance or its fluorine free alternative per year and its technical function/s in your process (e.g. anti foaming agent, surfactant).

Type of process:	
Product name of processing aid/s:	
Additional identifier:	
Consumption volume per year:	
Technical function of processing aid/s:	

Please specify the type of the processing aid.

- product with fluorinated substance/s
- product with fluorine free alternative substance/s

Process specification

If there is another process in which you are using a fluorinated substance or a fluorine free alternative product, please go on specifying the process and give additional information on the processing aid/s used. If there is no other process, leave the following lines blank.

...

Product specification

If you produce more than 5 products containing fluorinated and/or fluorine free alternative substances, please download this Excel-Sheet ([ProductListEU.xls](#)) and provide as much information on these products as possible. You can take as much time as needed to fill out the list and come back later to upload it below and leave the following lines blank..

If you produce 5 or less products containing fluorinated and/or fluorine free alternative substances, please give us first some basic information on one of the products.

Product name:
Additional product information (e.g. end product names, brand):
Production volume/units per year:

Product with fluorinated or fluorine free alternative substance/s?

- product with fluorinated substance/s
- product with fluorine free alternative substance/s

Please specify the products type.

Please choose **only one** of the following:

- PC1 - Adhesives, sealants
- PC2 - Adsorbents
- PC3 - Air care products
- PC4 - Anti-freeze and de-icing products
- PC8 - Biocidal products (e.g. disinfectants, pest control)
- PC9b - Fillers, putties, plasters, modelling clay
- PC9c - Finger paints
- PC14 - Metal surface treatment products, including galvanic and electroplating products
- PC15 - Non-metal-surface treatment products
- PC16 - Heat transfer fluids
- PC17 - Hydraulic fluids
- PC18 - Ink and toners
- PC20 - Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
- PC21 - Laboratory chemicals
- PC23 - Leather tanning, dye, finishing, impregnation and care products
- PC24 - Lubricants, greases and release products
- PC25 - Metal working fluids
- PC26 - Paper and board dye, finishing and impregnation products: including bleaches and other processing aids
- PC27 - Plant protection products
- PC28 - Perfumes, fragrances
- PC29 - Pharmaceuticals
- PC30 - Photochemicals
- PC31 - Polishes and wax blends
- PC32 - Polymer preparations and compounds
- PC34 - Textile dyes, finishing and impregnating products
- PC35 - Washing and cleaning products (including solvent based products)
- PC36 - Water softeners
- PC37 - Water treatment chemicals
- PC38 - Welding and soldering products, flux products
- PC39 - Cosmetics, personal care products including products such as toothpaste, deodorants, etc.

- PC40 - Extraction agents
- PC41 - Oil and gas exploration or production products
- PC42 - Electrolytes for batteries
- PC0 - Other (the type of product should be specified, e.g. UCN code)
- Other

Specific substances (C9 - C20 PFCAs)

Does your product contain any of the following substances? If so, please provide data on the average concentration of the very substance in the product (as an average value or as range) and its technical function in the product.

If none of these specific substances is used in your product please go on specifying which other per- or polyfluorinated substances or fluorine free alternative substances is/are used in the product and leave these fields blank.

	tonnage average value [kg/year]	~ tonnage min [kg/year]	~ tonnage max [kg/year]	technical functions
PFNA, Perfluorononan-1-oic acid (C9-PFCAA), CAS 375-95-1				
PFDA, Nonadecafluorodecanoic acid (C10-PFCAA), CAS 335-76-2				
PFUnDA, Henicosafluoroundecanoic acid (C11-PFCAA), CAS 2058-94-8				
PFDoDA, Tricosfluorododecanoic acid (C12-PFCAA), CAS 307-55-1				
PFTTrDA, Pentacosfluorotridecanoic acid (C13-PFCAA), CAS 72629-94-8				
PFTDA, Heptacosfluorotetradecanoic acid (C14-PFCAA), CAS 376-06-7				
PFPeDA, Nonacosfluoropentadecanoic acid, (C15 PFCA), CAS 141074-63-7				
PFHxDA, Hentriacontafluorohexadecanoic acid- (C16 PFCA), CAS 67905-19-5				
PFHpDA, Perfluoroheptadecanoic acid (C17 PFCA), CAS 57475-95-3				
PFODA, Pentatriacontafluorooctadecanoic acid (C18 PFCA), CAS 16517-11-6				

	tonnage average value [kg/year]	~ tonnage min [kg/year]	~ tonnage max [kg/year]	technical functions
PFNDA, Perfluorononadecanoic acid (C19 PFCA), CAS 133921-38-7				
- , Perfluoroeicosanoic acid (C20 PFCA), CAS 68310-12-3				

Substance specification

Please specify other fluorinated and/or fluorine free alternatives used in the product by providing the substances name/s, chemical group/s, CAS-Number/s and average concentration in the product average or range.

Please separate with a (,) if you use several fluorinated or fluorine free substances in the product.

If you don't use any other fluorinated nor fluorine free alternative substance in the product, please leave these fields blank.

Substance/s name/s:
Chemical group/s of substance/s:
CAS-Number/s:
Other identifier/s:
Concentration/s [w/w]:
Concentration/s range min [w/w%]:
Concentration/s range max [w/w%]:
Technical function/s :

Product Specification

If you produce another product containing fluorinated substances or fluorine free alternatives please give us again some basic information on the next product.

...

If you used the Excel list, please upload the list with the specification of your products here.

Please indicate how the production process is performed in your organisation.

Please choose **only one** of the following:

- continuous production with a consumption of products that contain fluorinated substances of less than 1 kg/ day
- continuous production with a consumption of products that contain fluorinated substances of more than 1 kg/ day
- continuous production with a consumption of products that contain fluorinated substances of more than 10 kg/ day
- continuous production with a consumption of products that contain fluorinated substances of more than 100 kg/ day
- batch production with a consumption of products that contain fluorinated substances of less than 1 kg per event
- batch production with a consumption of products that contain fluorinated substances of more than 1 kg per event
- batch production with a consumption of products that contain fluorinated substances of more than 10 kg per event
- batch production with a consumption of products that contain fluorinated substances of more than 100 kg per event
- Other: _____

Please indicate the average number of events per year.

_____ events per year

Please provide some information on potential pathways how fluorinated substances can leave your production process/es.

Please choose all that apply and provide a comment:

- Some fluorinated substances are leaving the process via waste water (either from the process itself or via cleaning procedures of the establishment), please indicate concentrations of the substance(s) in the waste water if data is available: _____
- Some fluorinated substances are contained in either liquid or solid waste, please name waste codes that are used to dispose the waste: _____
- Some fluorinated substances are emitted via off air, please indicate off air concentration [mg/m³]: _____
- Some fluorinated substances are decomposed under the conditions of the process, indicate decomposition losses [w/w]: _____

- Some fluorinated substances leave the process via the product (intended or as impurity).
Please indicate concentration in product [w/w]: _____

Are there fluorine free products on the market that could be used as an alternative in the same processes?

- Yes
 No
 Uncertain

If you wish to print or export your given information on this site, please use your browsers print function (ctrl-p).

Economic Data

What is the annual turnover of your company?

- < 100.000 €
- ≥ 100.000 – 500.000 €
- ≥ 500.000 – 1. Mio €
- ≥ 1 – 10 Mio €
- ≥ 10 - 100 Mio €
- > 100 Mio €

How many employees does your company currently employ?

- < 50 employees
- < 250 employees
- ≥ 250 employees

What is the relative share of of your products that contain or are produced with fluorinated substances on the overall turnover?

- < 5 %
- 5 - 20 %
- 20 - 50 %
- 51 - 80 %
- 81 -95 %
- > 95 %

What is the relative share of the fluorine free alternative products on the overall turnover?

- < 5%
- 5 - 20 %
- 20 - 50 %
- 51 - 80 %
- 81 -95 %
- > 95 %

Is the market price of the fluorine free alternative substances higher or lower?

- Price of fluorine free alternative is lower
- about the same
- Price of fluorine free alternative is higher

What are the production costs when fluorinated substances are used compared to their non fluorinated alternatives (if there are any)?

- more than 25% less costs than the fluorine free alternative
- somewhat less costs than fluorine free alternative (11-25%)
- about the same (+/- 10%)
- somewhat higher costs than fluorine free alternative (11-25%)
- more than 25% higher costs than the fluorine free alternative

How would you evaluate the substitution potential for fluorinated substances?

	Possible but with some efforts	Substitution would lead to complete reorganisation of business	Not possible, no alternatives
economically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
technically	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much time would you need to substitute completely to fluorine free alternative substances?

- Substitution possible in less than 1 year
- Substitution possible in 1-2 years
- Substitution possible in 2-5 years
- Substitution possible in 5-10 years
- Substitution possible in more than 10 years
- Substitution not possible at all

What would be your costs to completely substitute the fluorinated substances with fluorine free alternatives?

- less than 0.1 million €
- 0.1 - 1 million €
- 1 - 10 million €
- more than 10 million €

You have reached the end of this survey. If you press the submit button it won't be possible to come back into the survey.

If you would like to go on later or invite a colleague to give further information, please press the "resume later" button and forward the survey link in the invitation mail.

If you wish to print or export your given information on this site, please use your browsers print function (ctrl-p).

Your Feedback

Thank you very much for participating in this survey. We tried to make this survey as efficient and as easy-to-use as possible. However, we still strive for improvement with regard to any future surveys which aim at contributing relevant information to potential restriction proposals under REACH.

In order to identify an improvement potential, we would like to use your feedback to this survey. Please provide your feedback in the text field below.