

## 3M Response to the Call for evidence supporting an analysis of restriction options for PFAS

### PFAS for Product Release Liners

#### IV. Information on institute/organisation/person & Data protection rights

**Data subject rights: Access, rectification, erasure, blocking, right of revocation**

By participating in this survey, personal data may be processed in terms of the General Data Protection Regulation (GDPR) of the European Union. "Personal data" is any piece of information that allows a natural person to be identified directly or indirectly, for example a name or a personified e-mail address. "Processing" may mean, for example, the collection, recording and storing of these data.

PERMISSION FOR INFORMATION PURPOSES: I agree to the personal data I provide in the present survey, including my name and my e-mail address, to be collected, processed and stored for potential follow-up questions regarding this survey by the service provider of Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (BAuA), namely Webropol Deutschland GmbH, and to these being subsequently stored in the database of the Federal Chemicals Office. \*

☒ Yes ☐ No

The following information marked with \* on institute/organisation/person are mandatory fields.

##### Information on institute/organisation/person

|                                  |        |          |
|----------------------------------|--------|----------|
| Name*                            | 5.1.2e |          |
| Surname*                         |        |          |
| Name of institute/organisation * | 3M     |          |
| E-Mail*                          | 5.1.2e | @mmm.com |

Can we contact you with follow-up questions? \*

☒ Yes ☐ No

Are you interested in attending a meeting on specific uses of PFAS, mixtures and articles containing PFAS?

☒ Yes ☐ No

## Note on Confidentiality of information and data

I understand that it is my responsibility not to include confidential information in responses to general comments and in any responses to requests for specific information (e.g. company name, email addresses, phone numbers, signatures etc.). The competent authorities for REACH will not be held liable for any damages caused.

☒ Yes

I understand that it is my responsibility to mark confidential data and attachments as confidential. \*

☒ Yes

1. Please choose one of the following options. Do you have information on **PFAS**, **PFAS-containing mixtures** and **articles** or **alternatives** being able to replace PFAS.

☒ PFAS, PFAS-containing mixtures and/or articles

☐ alternatives i.e. other substances, non-chemical or functional replacement

## PART I – PFAS & PFAS Containing Mixtures and Articles

### V. Questions - Section A -PFAS and PFAS-containing mixtures and articles

2. Please define your role(s) with regard to PFAS and/or PFAS-containing mixtures and articles (see above for definitions of different roles). Please choose according to your primary role but multiple roles can be indicated. (please see Supplementary document for further explanation) \*

☐ Manufacturer of PFAS and/or PFAS-containing mixtures

☒ Manufacturer of PFAS-containing articles

☒ Importer of PFAS and/or PFAS-containing mixtures

☒ Importer of PFAS-containing articles

☐ Distributor of PFAS and/or PFAS-containing mixtures

☐ Distributor of PFAS-containing articles

☒ Downstream User of PFAS and/or PFAS-containing mixtures

☒ Downstream User of PFAS-containing articles

☐ Other (e.g. NGOs, Scientists)

## V. Questions - Section A -PFAS and PFAS-containing mixtures and articles

### Information on substance identity and quantities \*

- ☒ I have information  
☐ I have no information

3. Please fill in following information for PFAS and/or PFAS contained in mixtures and/or articles:

- chemical names, trade names, CAS and EC numbers:

5.1.1c

## V. Questions - Section A - PFAS and PFAS-containing mixtures and articles

### Information on hazards \*

- ☐ I have information  
☒ I have no information

## V. Questions - Section A - PFAS and PFAS-containing mixtures and articles

### Information on uses \*

- ☒ I have information  
☐ I have no information

7. Which are the area(s) of use and application of your PFAS and/or PFAS containing mixtures and/or articles.

- ☐ Textiles, leather and apparel, and textile related products  
☐ Cosmetic products  
☐ Food contact materials and non-stick kitchenware  
☐ Paper and packaging  
☐ Firefighting foams  
☒ **Household articles/Consumer mixtures (e.g. non-sticking coating, impregnation agents, polishes etc.)**  
☐ Construction products (e.g. surface treatments (paints, coatings))

- ☐ Lubricants and greases
- ☐ Chrome plating (including mist suppressing agents)
- ☐ Semiconductors
- ☐ Ski waxes

☒ **Medical devices and applications**

- ☐ Applications of PFAS within oil, gas and mining (apart from firefighting foam)
- ☐ F-gases e.g. (PFC, HFC, HCFC, HFE, HFO) in air-conditioning, heat-pump equipment, aerosol cans, foams etc.
- ☐ Uses of C1 perfluorinated carboxylic and sulfonic acids (trifluoroacetic acid (TFA) or trifluoromethanesulfonic acid (triflic acid, TfOH))

☒ **Transportation (automotive, aviation etc.) other than listed above (e.g.greases)**

- ☐ Photographic surface layers

☒ **Other**

8. If possible, please assign or estimate annual quantities of your PFAS and/or PFAS containing mixture and/or article to the individual uses. If possible, list products in the relevant application area that contain your PFAS and provide information or an estimate on quantities (i.e. concentrations or applied amount per cm<sup>2</sup>).

**Articles used in Industrial, Automotive, Aerospace and Electronics markets:**

- adhesive transfer tapes
- double coated tapes
- foam tape
- enhancing and shielding tapes

**Healthcare applications:**

- wound dressings
- medical tapes
- surgical drapes

**Household articles (Home Improvement):**

- silicone-based adhesives for used in picture hanging, bath and outdoor mounting solutions

9. You have ticked other(s), please specify the use(s) or area(s) of application respectively.

- **Electronics** – double coated tapes, adhesive transfer tapes and foam tapes. Bonding applications in mobile handheld devices and other electronic devices.

## V. Questions - Section A - PFAS and PFAS-containing mixtures and articles

### Information on functionality and final mixtures/articles \*

☒ I have information

☐ I have no information

27. Please describe the technical function of the PFAS, also with regard to the presence of PFAS in mixtures.

Adhesives and tapes are used in a variety of high-performance applications in medical devices, construction, automotive, aerospace, and electronics sectors. Various adhesive types are used in these industries, and one of the most common is silicone. In healthcare silicone is the preferred adhesive for wound care and is critical for reducing skin cell stripping and unintended medical complications due to skin damage. In industrial spaces silicone adhesives provide excellent flexibility, high temperature resistance and consistent performance over wide temperature ranges.

In order to use silicone tapes in their various applications, a product release liner accompanies the product to protect the adhesive from contamination until it is ready for use. This liner also serves the purpose of ensuring good adhesion to the surface (i.e. metal, plastic or even human skin) and proper application when it is used. The conventional coating used on a liner is also silicone. For high performance silicone-based adhesives, a silicone coated liner cannot be used. Instead, certain PFAS are used to coat the liner and provide the proper surface to protect the adhesive prior to use. The PFAS materials are coated and cured onto the liner itself and provide the performance necessary for usage.

The primary compound used in coating of release liners is 5.1.1c. No alternate chemistry has been identified that enables the release of the liner for silicone-based adhesives. The use of 5.1.1c and other PFAS in liner applications is critical for product performance. Two primary areas where this performance is needed is in healthcare and industrial / electronics applications.

#### Healthcare Applications

In healthcare it is essential to ensure the safe and effective clinical use of the health care product. For medical tapes, silicone tapes, wound dressings and surgical drapes, 5.1.1c enables effective release of the product from the liners and maintains the appropriate level of adhesion to enable the product to perform its intended function. For example, proper application, maintaining proper securement, and antimicrobial protection for surgical drapes are all enabled by the usage of PFAS materials.

#### Industrial Applications and Electronics

In industrial applications and Electronics, PFAS-enabled silicone adhesives are used in double coated tapes, adhesive transfer tapes and foam tapes. They are also used in bonding applications in mobile handheld devices and other electronic devices. 5.1.1c is used to coat the liner and provide the proper surface to protect the adhesive prior to use. It provides excellent flexibility, high temperature resistance and consistent performance over wide temperature ranges.

#### Home Improvement Applications

A fluorosilicone chemistry is used in release liners for our silicone-based adhesives in some home improvement applications. Two silicone-based chemistries are used in products, one picture

hanging and one for bath and outdoor products. The fluorosilicone release chemistry is used in the manufacture of the release liner which allows the silicone-based adhesives to be coated and converted in the form of an adhesive transfer tape to produce the final product.

28. Please specify the final mixtures/articles (with industrial, professional and consumer relevance) resulting from the use(s) of your PFAS. Please indicate whether your substance(s) is/are a component(s) of mixtures and/or articles. List the nature of these articles/mixtures as precisely as possible.

Final products in all cases are product using release articles that have been treated with a PFAS based coating. Except the Home Improvement applications, all other applications are designed for professional and industrial users in demanding applications. Some medical wound dressings are available for consumer use.

29. Please give information for every mixture/article you are producing/using on the tonnage of PFAS you are producing/using per year.

We would need more time to reproduce this data for all our products in response to this call for evidence.

30. To whom do you supply the PFAS and mixtures/articles containing PFAS you manufacture/import?

**Healthcare Applications**

Our health care products are supplied to health care providers, health care distributors, consumers/patients, and other health care/medical device companies.

**Industrial Applications**

3M supplies products using 5.1.1c and other PFAS for Release Liners to the industrial converters and users in the general industry, construction, automotive, building, transportation, and aerospace markets.

31. If possible, indicate the concentration (or concentration range) of PFAS or application levels (i.e. in mg per m<sup>2</sup>) for the PFAS and/or PFAS in your articles/mixtures, including polymers, and uses. Are they impurities, residues or intended additives?

We would need more time to reproduce this data for all our products in response to this call for evidence.

32. Which minimum concentration of PFAS alone or in your mixtures including polymers is feasible using the best available technique?

We would need more time to reproduce this data for all our products in response to this call for evidence.

33. Is the concentration mentioned in question 32 necessary for the performance of your substance, mixture, polymer? What is the minimum concentration of PFAS, mixtures including polymers that is necessary to maintain its function?

We would need more time to reproduce this data for all our products in response to this call for evidence.

40. Would it be possible for the use referred to in Question 7, listing the applicable use areas), to substitute this use with a different technical solution without environmental emissions?

There is no substitution in the applicable use areas as marked in Question 7 with equally high performing, technically and economically feasible products without environmental emissions from an overall life cycle assessment point of view. The strong C-F bond in the substance is key to get the required high performance and durability of the products in the various use areas. Any non C-F substance is expected to perform less and a detailed and comprehensive life cycle assessment would still need to evaluate the potential impact on the environment. Many of these high performing and highly durable products, used in a critical environment from a health and safety point of view, have to be externally certified, which means that any different product developed, if at all possible for the reasons mentioned above, would need to go through a lengthy certification process.

#### Questions 41-48

See question 40.

## PART II – SPECIFIC USES

### V. Questions - Section A - Specific Uses: Medical devices

10. What specific function do PFAS fulfil?

3M produces various health care products and solutions which rely on release liners for their function in health care applications. PFAS is used in the production of some of these liners. The use of PFAS in liner applications is critical for product performance and to ensure the safe and effective clinical use of the health care product.

For medical tapes, silicone tapes, wound dressings and surgical drapes, PFAS enables effective release of the product from the liners and maintains the appropriate level of adhesion to enable the product to perform its intended function for example, proper application, maintaining proper securement, and antimicrobial protection for surgical drapes.

The primary compound used in coating of release liners is 5.1.1c Other PFAS materials are used for similar liner coating applications. Also, 5.1.1c is used in some cases as a minor component of ink in liners for wound dressings to print critical warnings and product usage information. For the applications where PFAS materials are used, no known alternatives have been identified.

11. In what types of medical devices are they used?

Release liners of:

wound dressings, medical tapes; silicone adhesives and surgical drapes.

12. What PFAS-substances or PFAS-groups are used?

As mentioned above, 3M uses PFAS and similarly related fluorocarbons in the production of release liners for various health care products listed under question 11. The primary compound used in coating of release liners is 5.1.1c

13. Please give information for every medical device you are producing/using on the tonnage of PFAS you are producing/using per year.

We would need more time to reproduce this data for all our products in response to this call for evidence.

14. Please indicate the concentration (or concentration range) of PFAS(s) in your medical devices and applications.

We would need more time to reproduce this data for all our products in response to this call for evidence.

15. Please indicate the technical function of the PFAS(s) in the products.

For medical tapes, silicone tapes, wound dressings and surgical drapes, PFAS enables effective release of the product from the liners and maintains the appropriate level of adhesion to enable the product to perform its intended function for example, proper application, maintaining proper securement, and antimicrobial protection for surgical drapes.

16. Please also specify potential PFAS-impurities, residues or intended additives and indicate their possible concentrations or concentration ranges.

Not applicable.

17. Would you be able to phase out PFAS or pledged to phase out PFAS soon from all your products?

5.1.1c is a critical component of release liners for various health care products enabling proper functionality and ensuring the safe use of the product. Removal or phasing out 5.1.1c from these applications would most likely have significant implications on functionality and potential safe use of the product, requiring clinical practice change and increasing risk of complications.

18. If you use alternative substances, do you have any information on their risk profiles?

No alternative substances are being used. See answer to Question 17.

19. Please specify any information you have on reformulation costs.

Generally, costs associated with reformulation of health care products and medical devices is high due to re-registration requirements and activities needed to qualify the alternative formulation. As substitution would require feasibility studies, R&D efforts, processability and validation in production, plus clinical studies followed by (re)registration of the medical device according to medical device legislation, it could take several years to implement potential alternatives.

20. Please specify any information you have on impact on exports.

No specific information.

## PART III – ADDITIONAL INFORMATION

### Industrial and Electronics Application

3M supplies products using 5.1.1c and other PFAS for Release Liners to the industrial converters and users in the general industrial and electronics industry. PFAS-enabled silicone adhesives are used in double coated tapes, adhesive transfer tapes and foam tapes. They are also used in bonding applications in mobile handheld devices and other electronic devices. 5.1.1c is used to coat the liner and provide the proper surface to protect the adhesive prior to use. It provides excellent flexibility, high temperature resistance and consistent performance over wide temperature ranges.

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