

**To:** 5.1.2e [5.1.2e @arkema.com]; 5.1.2e [5.1.2e @rivm.nl]; 5.1.2e [5.1.2e @rivm.nl]  
**Cc:** 5.1.2e [5.1.2e @arkema.com]; 5.1.2e [5.1.2e @arkema.com]; 5.1.2e [5.1.2e @fleishmaneurope.com]; 5.1.2e [5.1.2e @fleishmaneurope.com]; restrictiePFAS[5.1.2i @rivm.nl]  
**From:** 5.1.2e  
**Sent:** Fri 3/12/2021 11:28:39 AM  
**Subject:** RE: ARKEMA Follow Up & Document (WP4G)  
**Received:** Fri 3/12/2021 11:28:41 AM

Dear 5.1.2e

Thanks for your feedback, much appreciated.

In case we need further information, we might contact you in the future.

Best regards,

5.1.2e

5.1.2e @rivm.nl

RIVM, Centre for Safety of Substances and Products  
 Antonie van Leeuwenhoeklaan 9 | 3721 MA Bilthoven | The Netherlands  
 P.O. Box 1 | 3720 BA Bilthoven | [www.rivm.nl/en](http://www.rivm.nl/en)  
[www.chemischestoffengoedgeregeld.nl](http://www.chemischestoffengoedgeregeld.nl)

**From:** 5.1.2e <5.1.2e @arkema.com>

**Sent:** woensdag 3 maart 2021 22:11

**To:** 5.1.2e <5.1.2e @rivm.nl>; 5.1.2e <5.1.2e @rivm.nl>; 5.1.2e <5.1.2e @rivm.nl>  
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**Cc:** 5.1.2e <5.1.2e @arkema.com>; 5.1.2e <5.1.2e @arkema.com>; 5.1.2e (FleishmanHillard) <5.1.2e @fleishmaneurope.com>; 5.1.2e (FleishmanHillard) <5.1.2e @fleishmaneurope.com>

**Subject:** RE: ARKEMA Follow Up & Document

Dear 5.1.2e

I hope this mail finds you all in good health.

We're happy to share with you in the attached document our answers to the follow-up questions you sent to us after our meeting together.

We hope that you will find them helpful and that they will provide more insights on fluoropolymer production without PFAS surfactants.

Should you need any further information, we will happy to discuss further with you.

Best regards,

5.1.2e

5.1.2e

Office: 5.1.2e

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[www.ExtremeMaterials.com](http://www.ExtremeMaterials.com)

**De :** 5.1.2e <5.1.2e @rivm.nl>

**Envoyé :** jeudi 11 février 2021 10:41

**À :** 5.1.2e <5.1.2e @arkema.com>; 5.1.2e <5.1.2e @rivm.nl>; 5.1.2e <5.1.2e @rivm.nl>

**Cc:** 5.1.2e <5.1.2e @arkema.com>; 5.1.2e <5.1.2e @arkema.com>; 5.1.2e (FleishmanHillard) <5.1.2e @fleishmaneurope.com>; 5.1.2e (FleishmanHillard) <5.1.2e @fleishmaneurope.com>

**Objet :** RE: ARKEMA Follow Up & Document

Dear 5.1.2e and others,

I would like to thank you again for the valuable meeting. It was very interesting for us to get some insight in the PVDF production.

Attached, you will find a short report of the meeting in which I included the PDF document. I would like to share this report with my colleagues from NO, SE, DK, DE. Is this fine with you?

After our meeting 5.1.2e and I have been reflecting on the meeting and some follow-up questions came in

to our mind.

If you have the possibility to answers these questions it would be great.

Kind regards,

5.1.2e

1. Which processing aid did Arkema used before changing to FSF?
2. Arkema indicated that they started with FSF in 2008, and now it is about 80% of the PVDF production. Is it possible to indicate a bit more on the developments between 2008 and 2021? Linear growth? Mainly to get an impression in how much time it takes to change to a new production method.
3. About the application of PVDF in paints/coatings; how is this paint/coating applied on the construction material? In a factory before construction or afterwards?
4. We are curious about the state of play concerning the recycling of PVDF. Firstly, whether it takes place for all PVDF products or whether there are specific products for which a large amount of recycling takes place (in contrast to others). Secondly, whether the recycling activities has been recently started or are already in place for a considerable number of years. Is it possible to give a percentage of the PVDF being recycled.
5. During our WebEx it was explained that mechanical recycling takes place. Is this material mixed with virgin material and being used as input in the production of new PVDF or is there a separate production line producing material with a specific 'recycling' label?
6. Arkema gave the example of pipelines, risers and flowlines for the oil industry in the presentation. Does Arkema produce such products themselves or are they being produced by another company to which Arkema sells the raw material? Are pipes already being recycled and how has the collection of the pipelines been organized (e.g. are there certain guarantees for collection of the end-of-life, is there a lease contract of the pipelines instead of sales)?
7. During our WebEx meeting Arkema indicated the durability of the PVDF products. Has Arkema carried out research on the wear of for instance coatings and the degradation products that may be formed?
8. Does Arkema know what is the fate of PVDF during incineration and landfill?

5.1.2e

5.1.2e

[www.chemischestoffengoedgeregeld.nl](http://www.chemischestoffengoedgeregeld.nl)

**From:** 5.1.2e <5.1.2e@arkema.com>

**Sent:** vrijdag 5 februari 2021 18:22

**To:** 5.1.2e <5.1.2e@rivm.nl>; 5.1.2e <5.1.2e@rivm.nl>; 5.1.2e <5.1.2e@rivm.nl>

**Cc:** 5.1.2e <5.1.2e@arkema.com>; 5.1.2e <5.1.2e@arkema.com>; 5.1.2e (FleishmanHillard) <5.1.2e@fleishmaneuropa.com>; 5.1.2e (FleishmanHillard) <5.1.2e@fleishmaneuropa.com>

**Subject:** ARKEMA Follow Up & Document

Dear all,

Thank you again for taking the time to speak with us earlier this week. We hope the discussions were helpful and provided you with some insights on fluoropolymer production without PFAS surfactants. This is a complex topic, and we would be happy to provide you or your colleagues in your Competent Authority with further information.

Attached is a short document summarizing our presentation. You can find further information in our answer to the call for evidence. I am also taking this opportunity to share contact details of our team at Arkema in the cc: entry of this email.

Thank you again for your time, and I hope that we will be able to speak further in the near future.

Kind regards,

5.1.2e  
5.1.2e

Office: 5.1.2e

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