

To

Ms Marie Dollhofer
BiPRO GmbH,
Grauertstr. 12,
81545 Munich, Germany

Stakeholder Consultation on Exemption Review under Directive 2011/65/EU, B-2016

Dear Mrs. Dollhofer

Please find attached our position regarding the exemption review under Directive 2011/65/EU

1. Scope / wording and relevant category of the exemption request

The applicant has requested an exemption for “Cadmium and Lead used for windows and doors, being manufactured out of plastic window profiles containing recovered PVC, in case these windows and doors may be equipped or retrofitted with electric and/or electronic devices”

1.1. Do you agree with the scope of the exemption as proposed by the applicant?

Yes, we agree.

1.2. Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.

2. Environmental / health protection / consumer safety considerations

2.1. Do you have any comments with respect to the applicant’s assessment of environmental, health and consumer safety issues?

The articles are co-extruded which means that the consumer doesn’t have a chance to get in contact with the post-consumer recycle material.

2.2. Do you know about possible health effects of Cd/Pb contained in recycled PVC, which are no longer permitted in virgin PVC to protect the health of different actors?

No, we don’t know about any health effects when using recycled PVC. The contained substances cadmium laurate, cadmium stearate, lead stearate, dibasic lead stearate, dibasic lead phosphite and tribasic lead sulphate are not volatile and for that no emission can occur and cause harmful effects.

Comment: We refer to the study “Health Risk of Occupational Lead (Pb) Exposure in Conventional PVC Recycling and Converting Operation”, prepared in 2016. The conclusion states that there is no occupational health risk.

2.3. Do you have any comments regarding the environmental and health requirements as per the REACH Regulation?

We refer to REACH annex XVII entry 23 §4 (cadmium derogation for more than 0.01%) as a similar case.

Comment: Commission Regulation 494/2011 modified Annex XVII of REACH for cadmium in polymers, and took into account the specific aspects of recycling. Lead is restricted only in consumer articles children can put in the mouth (Commission Regulation 2015/628). We think this is not applicable to PVC window profiles.

2.4. Do you have any comments regarding the applicant’s assessment of impacts and benefits?

We do agree with the applicant’s assessment. It is not foreseeable which profiles will be retrofitted with electrical or electronical devices. It is a benefit that cadmium and lead compounds are embedded within the polymer matrix because incineration would set free soluble oxides of cadmium and lead.

- 2.5. Would you be able estimating the amount of Cd and Pb in recycled PVC-U profiles of electronic doors and windows which is placed on the market in the EU every year? Please indicate figures if yes.

We assume the lead content in recyclates intended to be used in PVC windows being around 1% w/w or lower. In specific and single cases this amount can reach around 2.0% w/w.

Comment: In future lead content in recycled PVC will steadily decrease due to the fact that lead based stabilizers have been substituted.

- 2.6. Do you support the applicant’s conclusion that:

“The use of recycled PVC has a strong positive environmental impact by closing the loop towards a circular economy, by reducing the use of raw materials and by reducing the primary energy demand in the extrusion process and thus aims to achieve low carbon manufacturing”.

Please argue why or why not.

We fully agree. The today’s existing controlled loop scheme to collect and to recycle used PVC windows amounts to around 10% all over Europe. It means that new PVC windows contain - as an average - around 10% recycled PVC.

The production of one ton of PVC results in the emission of 2 tons of CO₂ equivalents. Supposing an annual production of 700.000 tons of PVC window profiles in the EU, by the use of 70.000 tons of recycled PVC (10%), an equivalent carbon emission of 140.000 tons can be saved.

- 2.7. Is it possible to quantify any environmental impact?

The impact of lowering the Global Warming Potential GWP by using recyclate has been demonstrated by specific sensitivity analysis in Environmental Product Declarations for PVC windows.

(source: <https://epd-online.com/PublishedEpd/Detail/9185>)

3. Socio - economic impacts of substitution

Please provide comments regarding the socio-economic impact of substitution as applicable.

Do you support the following statement of the applicant regarding socio-economic benefits of recycled PVC: “The reuse of PVC waste, however, has a proven socio-economic benefit in particular with regard to decarbonisation, circular economy, competitiveness and raw material availability. For instance, the today’s ratio of around 16% recovered PVC used in PVC profiles reduce primary energy demand by approximately 8% (source: “Environmental Product Declaration for double - glazed PVC Windows, § 6.3 Sensivity concerning the use of recycled PVC (source: <https://epd-online.com/PublishedEpd/Detail/9185>).”

- 3.1. Can you support this statement with further relevant data?

Relevant data are mentioned in answer 2.6. Furthermore, competitiveness of window producers will be strengthened by the use of post-consumer waste. Pricing for post-consumer material is about 10% lower than virgin mixed PVC material. The use of this price advantage is essential for the competitiveness of European window producers.

If you don't agree to this statement, could you provide relevant data?

Please feel invited to provide data regarding the total negative environmental, health and consumer safety impacts caused by substitution, as well as data regarding the total environmental, health and consumer safety benefits of exemption.

4. Any comments on potential adverse impacts on innovation in case of granting the exemption?

We do not see any adverse impact by granting the exemption because the materials are co-extruded and the innovation in developing window profiles lies in the development of the co-extrusion materials. The co-extruded top layer is free of lead and cadmium.

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