

A.I.S.E. guidance to industry *(Ver. 20 August 2019)*

Appropriate use of the A.I.S.E. Product Environmental Footprint Category Rules (PEFCR) for Household Heavy Duty Liquid Laundry Detergents (issued in March 2019 and corrected in August 2019)

INTRODUCTION

A.I.S.E. is committed to deliver impactful projects setting high level industry standards to drive sustainable sourcing, production, design, consumption and end of life waste management options. A.I.S.E. has a long history to steer best practices in such domains and aims to be – with its members – a role model sector, reducing the industry’s social and environmental footprint and embracing the Circular Economy. It is in this context that A.I.S.E. has initiated in 2013 its PEF pilot on Household Heavy Duty Liquid Laundry Detergents jointly with the European Commission and various stakeholders¹; this pilot formally ended in August 2019 with the publication of a corrected version 1.1. of the PEF Category Rules (PEFCR) for household liquid laundry detergents. A.I.S.E.’s main learnings are that the EF method is judged overall as moving into the right direction since it is intended to evaluate and reduce the environmental footprint of products, based on a European-wide harmonised and transparent LCA-based approach. However, while it certainly has potential mid to long-term, it is not yet sufficiently mature since the LCA science is still evolving. Therefore, some limitations – notably concerning the external use of PEF information – do apply to this first PEFCR version. This note provides guidance to the industry members on the most appropriate use of the PEFCR based on the available learnings.

1) A.I.S.E.’s PERSPECTIVE ON THE EU PEF PILOT PROJECT

The main learnings from A.I.S.E. and its A.I.S.E. PEF Technical Secretariat from the PEF pilot exercise are outlined below:

Progress

- The EU Environmental Footprint pilot phase succeeded to provide a well needed European-wide harmonization of LCA methodologies and datasets applicable to detergents.
- The PEF Pilot has benefited strongly from the highly collaborative approach via a multi-stakeholder PEF Technical Secretariat (TS), which pragmatically and effectively secured the engagement and consultation of various stakeholders together with the concerned industries during the technical development and key phases of the pilot.
- Relevant impacts of a European representative liquid laundry detergent were identified.
- The risk-based Environmental Safety Check tool (ESC) used since 2010 in the context of the A.I.S.E. voluntary industry initiative ‘Charter for Sustainable Cleaning’ has continued to prove its validity for evaluating the ecotoxicity impact of detergents despite the challenges on this area.²

Limitations (highlights):

- Only a limited number of EF impact methods were found to be sufficiently mature, whereas several methods are not yet ready for comparative testing.
- The ‘Climate Change’ impact category appears technically ready to be considered. However, since the largest climate change impact is related to the electrical water heating during the

¹ http://ec.europa.eu/environment/eussd/smgp/ef_pilots.htm

² Due its lack of robustness, the European Commission has officially excluded the EF USEtox method temporarily from the PEF procedure to identify the most relevant impact categories and benchmarking and external communication (this applies to all PEFCRs elaborated during the EF pilot phase).

main wash cycle water, the use of the PEF climate change indicator without an evaluation of low temperature cleaning performance is not meaningful.

- During the 5-year PEF pilot, the reference product as defined in 2013 became outdated and would need to be updated (e.g. PREP L2 liquid detergent compaction in 2016-2018).
- Not all LCI datasets, including those for chemicals, as centrally provided by the European Commission, represent the latest status. For surfactants, an outdated dataset from 1994 had to be used, since the 2016 ERASM dataset did not meet all EU PEF requirements.
- The applied wastewater treatment model is a compromise. More accurate existing models could not be tested but should be considered for future PEFCR updates. In addition, datasets provided by the EC for modelling wastewater treatment are not fully compliant with the current EF requirements.
- Several EF impact assessment methods were centrally introduced at a late stage during the pilot test, without the possibility for the PEF TS to assess these in detail due to lack of time. In addition, the replacement of impact methods has not always led to an increase in robustness of the PEF methodology.
- Since the largest contribution (for most impact categories) is related to the water heating in the consumer use phase, the PEF profile of a detergent are highly dependent on the country where the product is consumed, specifically related to the country 'energy mix'.

2) **A.I.S.E. GUIDANCE ON APPROPRIATE USE OF PEFCR**

Based on the above analysis and the listed limitations of the EF methodology, A.I.S.E. provides the following guidance how the PEFCR should (or should not) be used by manufacturing companies striving to reduce the environmental footprint of household heavy duty liquid laundry detergent products.

Use internally by Companies:

- The available PEFCR can be used internally by companies for the purpose of data collection, general screening and priority setting (along all life-cycles and environmental impacts). This can help to influence and improve how ingredients and packaging materials are sourced and where to invest most effectively to improve the efficiency of production, transport, use and waste management.
 - Product and packaging development according to eco-design principles can influence the environmental impact of a detergent product by evaluating its footprint versus the PEFCR benchmark.
- ⇒ ***In both cases, A.I.S.E. is supportive that the PEFCR can be used meaningfully internally to achieve progress.***

Use in Business to Business (B2B) context:

- The available PEFCR can be used to engage with suppliers (upstream) with the objective to improve relevant processes. This can range from data collection from suppliers, optimisation of raw material transport, sourcing and production of raw materials, etc.
- ⇒ ***A.I.S.E. is supportive that the PEFCR can be used meaningfully in this context.***
- Caution is needed before using the PEFCR and PEF results with retailers and customers (Downstream). The PEFCR results can be used to inform retailers and customers on relevant life-cycle stages, impact categories and processes as well as measures taken by manufacturing companies on the basis of from PEF results, but A.I.S.E. does not recommend to use product or SKU specific PEF results given the complexity, remaining challenges and the numerous methodological limitations.
- ⇒ ***A.I.S.E. recommends NOT to disclose individual quantitative PEF results in a B2B context.***



Use externally with Consumers (B2C):

- ⇒ **A.I.S.E. recommends NOT to disclose individual quantitative PEF results to consumers** due to the complexity of the PEF method¹ and for the reasons listed above.
- In case a company still wants to apply environmental claims on its product based on the PEFCR, a PEF study may be carried out internally to check and substantiate whether a claim is relevant and not misleading. Burden shifting must be avoided and all aspects should be considered. In this context, it is important to mention that the PEFCR methodology does not cover the full dimension of environmental impact (e.g. biodiversity is excluded so far) and that several PEF impact methods are not yet sufficiently mature to allow comparative assessments.
- Due to the importance of the use phase, consumer engagement is key in order to help reduce the environmental burden. Even though the energy used for heating the wash water has been identified as main driver, the focus should not be on the reduction of carbon footprint only (i.e. low temperature washing advice). Further consumption behaviours such as the optimal fill level of the washing machine, the adequate product dosing and packaging saving are relevant as well. A.I.S.E. recommends to address those via common A.I.S.E. best use tips for consumers (cf. cleanright best use panel below²):



A.I.S.E. CONCLUDING REMARKS

The 2013-2018 PEF pilot was very useful and a good learning exercise for A.I.S.E. and its Technical Secretariat, but many questions remain. A.I.S.E. and its member companies will continue to contribute actively and constructively to the development of meaningful and effective lifecycle-based sustainability schemes as well as voluntary sustainability initiatives. This will help to progress the sustainable development of the sector by achieving significant reductions of the lifecycle impacts of detergents and cleaning products.

The 'A.I.S.E. Charter for Sustainable Cleaning'³ will continue to be the reference scheme for our sector, aiming to drive meaningful progress for the whole sector across all lifecycle phases. It has been demonstrated that the overall footprint of both manufacturing and products has decreased since the launch of this LCA-based and innovation-friendly scheme in 2005. Based on the PEF Pilot learnings, A.I.S.E. will assess how to improve the product component of the Charter, e.g. by adopting best in class lifecycle and environmental footprinting practices for the life cycle screening of product categories with the objective to improve the identification of the most relevant environmental impacts. In parallel, social aspects (e.g. CSR) will have to be considered in order to deliver on our industry's sustainable development in a comprehensive way.

¹ The A.I.S.E. PEF pilot included extensive consumer research. It was found out that adequate consumer understanding was only achievable when information on a product's PEF profile was combined with very detailed and conscious explanation on impact categories and processes. Addressing this remains an unresolved challenge, especially at the point of sale, where purchase decisions are taken rather quickly.

² Available from <https://www.aise.eu/library/artwork.aspx>

³ <https://www.sustainable-cleaning.com/en.home.orb>